ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2020–0148; FRL–7527–02–OAR]

RIN 2060–AU67

National Emission Standards for Hazardous Air Pollutants: Refractory Products Manufacturing Residual Risk and Technology Review

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes the residual risk and technology review (RTR) conducted for the Refractory Products Manufacturing source category regulated under national emission standards for hazardous air pollutants (NESHAP). The Environmental Protection Agency (EPA) found the risks due to emissions of air toxics from this source category to be acceptable and that the standards provide an ample margin of safety to protect public health. As a result, the Agency is making no revisions to the emission limits for this source category based on the residual risk. In our technology review, after reviewing developments in practices, processes, and control technologies, the EPA determined that no revisions to the numeric emission limits is necessary. However, the EPA is revising certain work practice provisions based on the technology review. These final amendments also include new provisions for certain hazardous air pollutants (HAP) and a revision of the alternative fuel provisions. In addition, the Agency is taking final action on the proposed amendments for the source category to address emissions during periods of startup, shutdown, and malfunction (SSM); emissions during periods of scheduled maintenance; electronic reporting of notification of compliance status (NOCS) reports, performance test results, and performance evaluation results; the addition of test methods and guidance materials; updates to several test methods; and other miscellaneous clarifying and technical corrections.

DATES: This final rule is effective on November 19, 2021. The incorporation by reference (IBR) of certain publications listed in the rule is approved by the Director of the Federal Register as of November 19, 2021.

ADDRESSES: The U.S. Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA–HQ–OAR–2020–0148. All documents in the docket are listed on the *https://www.regulations.gov/* website. 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. Publicly available docket materials are available either electronically through *https://www.regulations.gov/,* or in hard copy at the EPA Docket Center, WJC West Building, Room Number 3334, 1301 Constitution Ave. NW, Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the EPA Docket Center is (202) 566–1742.

FOR FURTHER INFORMATION CONTACT: For questions about this final action, contact Ms. Paula Deselich Hirtz, Minerals and Manufacturing Group, 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) 541–2618; fax number: (919) 541–4991; and email address: *hirtz.paula@epa.gov.* For specific information regarding the risk modeling methodology, contact Mr. Chris Sarsony, Health and Environmental Impacts Division (C539–02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–4843; fax number: (919) 541–0840; and email address: *sarsony.chris@epa.gov.*

SUPPLEMENTARY INFORMATION: *Preamble acronyms and abbreviations.* The Agency uses 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 below. Also, throughout this preamble the terms ''we,'' ''us,'' or ''our'' mean the EPA.

BLD bag leak detection
CAA Clean Air Act
CRA Congressional Review Act
CDX Central Data Exchange
CEDRI Compliance and Emissions Data Reporting Interface
EJ Environmental Justice
EPA Environmental Protection Agency
ERT Electronic Reporting Tool
FTIR Fourier Transform Infrared
HAP hazardous air pollutants(s)
HQ hazard quotient
IBR incorporation by reference
ICR Information Collection Request
lb/hr pounds per hour
MACT maximum achievable control technology
HCl hydrogen chloride
HF hydrogen fluoride
Hg mercury
MIR maximum individual risk
NAAQS National Ambient Air Quality Standards
NACWA National Association of Clean Water Agencies
NEI National Emission Inventory
NESHAP national emission standards for hazardous air pollutants
NOCS notification of compliance status
OM&M operation, maintenance, and monitoring
OPL operating parameter limit
PDF portable document format
PM Particulate matter
POM polycyclic organic matter
ppmvd per million by volume, dry basis
RFA Regulatory Flexibility Act
RTO regenerative thermal oxidizer
RTR risk and technology review
SSI Sewage Sludge Incinerator
SSM startup, shutdown, and malfunction
THC total hydrocarbons
tpy tons per year
TOSHI target organ specific hazard index
UMRA Unfunded Mandates Reform Act
μg/dscm micrograms per dry standard cubic meter
μg/Nm^3 micrograms per normal cubic meter
UPL upper prediction limit
VCS voluntary consensus standards
VE visible emissions
XML extensible markup language

Background information. On January 14, 2021, the EPA proposed revisions to the Refractory Manufacturing Products NESHAP based on our RTR (86 FR 3095, January 14, 2021). 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 document titled *Summary of Public Comments and Responses on Proposed Rule: National Emission Standards for HAP from Refractory Products Manufacturing (40 CFR part 63, subpart SSSSS) Residual Risk and Technology Review, Final Amendments,* located in Docket ID No. EPA–HQ–OAR–2020–0148. A ''track changes'' version of the regulatory language that incorporates the changes in this action is available in the docket.

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. Refractory Products Manufacturing, the source category that is the subject of this final action, is regulated under 40 CFR part 63, subpart SSSSS. The North American Industry Classification System codes for the refractory products industry are 327124 (clay) and 327125 (nonclay). We estimate that three major source facilities engaged in refractory products manufacturing will be affected by this final rule. 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/refractory-products-manufacturing-national-emissions-standards.* Following publication in the **Federal Register**, the EPA will post the **Federal Register** version and key technical documents at this same website.

Additional information is available on the RTR website at *https://www.epa.gov/stationary-sources-air-pollution/risk-and-technology-review-national-emissions-standards-hazardous.* This information includes an overview of the RTR program and links to project websites for the RTR source categories.

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 January 18, 2022. 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. EPA, Room 3000, WJC South Building, 1200 Pennsylvania Ave. NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office, Office of General Counsel (Mail Code 2344A), U.S. EPA, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

II. Background

A. What is the statutory authority for this action?

Section 112 of the CAA establishes a two-stage regulatory process to address emissions of HAP from stationary sources. In the first stage, we must identify categories of sources emitting one or more of the HAP listed in CAA section 112(b) and then promulgate technology-based NESHAP for those sources. ''Major sources'' are those that emit, or have the potential to emit, any single HAP at a rate of 10 tons per year (tpy) or more, or 25 tpy or more of any combination of HAP. For major sources, these standards are commonly referred

to as maximum achievable control technology (MACT) standards and must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). In developing MACT standards, CAA section 112(d)(2) directs the EPA to consider the application of measures, processes, methods, systems, or techniques, including, but not limited to, those that reduce the volume of or eliminate HAP emissions through process changes, substitution of materials, or other modifications; enclose systems or processes to eliminate emissions; collect, capture, or treat HAP when released from a process, stack, storage, or fugitive emissions point; are design, equipment, work practice, or operational standards; or any combination of the above.

For these MACT standards, the statute specifies certain minimum stringency requirements, which are referred to as MACT floor requirements, and which may not be based on cost considerations. See CAA section 112(d)(3). For new sources, the MACT floor cannot be less stringent than the emission control achieved in practice by the best-controlled similar source. The MACT standards for existing sources can be less stringent than floors for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources in the category or subcategory (or the best-performing five sources for categories or subcategories with fewer than 30 sources). In developing MACT standards, we must also consider control options that are more stringent than the floor under CAA section 112(d)(2). We may establish standards more stringent than the floor, based on the consideration of the cost of achieving the emissions reductions, any non-air quality health and environmental impacts, and energy requirements.

In the second stage of the regulatory process, the CAA requires the EPA to undertake two different analyses, which we refer to as the technology review and the residual risk review. Under the technology review, we must review the technology-based standards and revise them ''as necessary (taking into account developments in practices, processes, and control technologies)'' no less frequently than every 8 years, pursuant to CAA section 112(d)(6). Under the residual risk review, we must evaluate the risk to public health remaining after application of the technology-based standards and revise the standards, if necessary, to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. The residual risk review is required within 8 years after promulgation of the technology-based standards, pursuant to CAA section 112(f). In conducting the residual risk review, if the EPA determines that the current standards provide an ample margin of safety to protect public health, it is not necessary to revise the MACT standards pursuant to CAA section 112(f).[1] For more information on the statutory authority for this rule, see 86 FR 3097 (January 14, 2021).

B. What is the Refractory Products Manufacturing source category and how does the NESHAP regulate HAP emissions from the source category?

The EPA promulgated the Refractory Products Manufacturing NESHAP on April 16, 2003 (68 FR 18730). The standards are codified at 40 CFR part 63, subpart SSSSS. The Refractory Products Manufacturing industry consists of facilities that manufacture refractory products, such as refractory bricks, refractory shapes, monolithics, kiln furniture, crucibles, and other materials used for lining furnaces and other high temperature process units. The source category covered by this NESHAP includes three major source facilities.

The NESHAP groups refractory product manufacturing processes into four subcategories: Clay refractories, nonclay refractories, chromium refractories (nonclay) and pitch-impregnated refractories (nonclay). The three major source facilities manufacture clay and/or nonclay refractory products and can be grouped into the clay and nonclay refractories subcategories. Chromium refractory products and pitch-impregnated refractory products are not manufactured by any of the three major source facilities.

The Refractory Products Manufacturing NESHAP specifies emission limits, operating limits, and work practice standards for existing affected thermal process units and for new and reconstructed affected thermal process units that emit organic HAP according to refractory product type. For existing clay refractory product kilns, the NESHAP requires the use of natural gas or equivalent fuel at all times, except during periods of natural gas supply interruption or curtailment, to limit metal HAP, hydrogen fluoride (HF) and hydrogen chloride (HCl) emissions. New clay refractory product kilns are required to meet numeric limits for HF and HCl. For existing and new curing ovens, shape dryers, and kilns that are used to process refractory products that use organic HAP (*i.e.,* nonclay refractory product sources), the NESHAP provides the option of meeting a total hydrocarbon (THC) concentration limit or reducing the THC mass emissions by at least 95 percent. The NESHAP also establishes operating limits for thermal process sources and control devices, which are based on operating parameters established during performance testing. Additional detail on the refractory product manufacturing source category and NESHAP requirements are provided in the proposal preamble (86 FR 3083, January 14, 2021).

C. What changes did we propose for the Refractory Products Manufacturing source category in our January 14, 2021 RTR proposal?

On January 14, 2021, the EPA published a proposed rule in the **Federal Register** for the Refractory Products Manufacturing NESHAP, 40 CFR part 63, subpart SSSSS, that took into consideration the RTR analyses (86 FR 3095). For this source category, we proposed that the risks are acceptable, and that additional emission controls are not necessary to provide an ample margin of safety. For the technology review, we proposed improvements to the existing work practice standard for affected continuous kilns using THC emission control devices. We also proposed the following amendments: Standards for previously unregulated HAP for affected sources in the clay and nonclay refractory subcategories; the requirement that NOCS reports, performance test results, and performance evaluation results be electronically submitted; revisions to the SSM provisions of the rule; new test methods and incorporation by reference (IBR) of alternative test methods; and other minor technical and editorial revisions.

III. What is included in this final rule?

This action finalizes the EPA's determinations pursuant to the RTR provisions of CAA section 112 for the Refractory Products Manufacturing source category and amends the Refractory Products Manufacturing NESHAP based on those determinations. This action also

[1] The Court has affirmed this approach of implementing CAA section 112(f)(2)(A): *NRDC* v. *EPA,* 529 F.3d 1077, 1083 (D.C. Cir. 2008) (''If EPA determines that the existing technology-based standards provide an 'ample margin of safety,' then the Agency is free to readopt those standards during the residual risk rulemaking.'').

finalizes other changes to the NESHAP, including the proposed changes described above, except we are finalizing a slightly modified version of the proposed work practice standard for affected continuous kilns using THC emission control devices, as explained in section IV.B.2 of this preamble; and we are not finalizing the proposed allowance to use alternative fuels during periods of natural gas supply curtailment or interruption from the natural gas fuel requirement, as explained in section IV.B.3 of this preamble. We are finalizing these requirements as a result of the public comments we received on the proposed rule.

A. What are the final rule amendments based on the risk review for the Refractory Products Manufacturing source category?

This section describes the final amendments to the Refractory Products Manufacturing NESHAP (subpart SSSSS) being promulgated pursuant to CAA section 112(f). In this action, we are finalizing our proposed determination that risks from the Refractory Products Manufacturing source category are acceptable, the standards provide an ample margin of safety to protect public health, and additional standards are not necessary to prevent an adverse environmental effect. The EPA proposed no changes to the subpart based on the risk review conducted pursuant to CAA section 112(f). The EPA received no new data or other information during the comment period that would cause us to change our proposed risk determination. Therefore, we are not requiring additional controls or new requirements under CAA section 112(f)(2) for subpart SSSSS in this action.

B. What are the final rule amendments based on the technology review for the Refractory Products Manufacturing source category?

We determined that there was a development in practice that warranted revision of the MACT standards for this source category. Therefore, to satisfy the requirements of CAA section 112(d)(6), we proposed revisions to the MACT standards to improve the existing work practice standard for affected continuous kilns using emission control devices. The proposed revisions were based on the best practices of one facility and included:

- Limitation of the work practice standard to THC emission control devices only,
- an annual limit on the number of hours for bypass of the control device,
- the requirement to process product containing lower percentages of organic HAP content in the resins, binders and additives (less than the average organic HAP mass fraction),
- an allowance for the processing of five kiln cars per year with greater than average organic HAP mass fraction, and
- reporting of the mass of organic HAP emissions for bypass periods in the semi-annual compliance report.

The EPA received additional data during the comment period that caused us to change these proposed work practice requirements. Therefore, in this action, we are finalizing the following requirements under CAA section 112(d)(6) for subpart SSSSS:

- The proposed limitation of the work practice standard to THC emission control devices only,
- the proposed annual limit on the number of hours for bypass of the control device,
- revised requirement to maintain the organic HAP processing rate below whichever is lower, either (a) the average organic HAP processing rate (*i.e.,* the average organic HAP processing rate (pounds per hour (lb/hr)) based on actual production on a 6-month rolling basis, not to include periods of kiln shut down) or (b) the lowest hourly organic HAP processing rate determined during the most recent performance test,
- removal of the proposed allowance for processing of five kiln cars per year with greater than average organic HAP mass fraction during control device maintenance and bypass,
- revised reporting requirements for the semi-annual compliance report, including:
  - The average organic HAP processing rate based on actual production on a 6-month rolling basis (not to include periods of kiln shut down) or the lowest hourly organic HAP processing rate from the most recent performance test (whichever is lower), for bypass periods,
  - the actual organic HAP processing rate,
  - the amount of product produced and the mass of organic HAP in the product produced,
  - the estimated THC emissions,
  - the number of hours the control device was bypassed during the compliance period, and
  - the cumulative number of hours the control device was bypassed over the last 12-month rolling period.

We are not finalizing the proposed allowance for processing of five kiln cars per year with greater than average organic HAP mass fraction during control device maintenance and bypass. For more information regarding the final improvements to the work practice standard that applies for continuous kilns with THC emissions control devices, see section IV.B of this preamble.

In addition, the EPA received a comment during the comment period that caused us to review the fuel combustion technology used by sources in the source category and consequently revise the existing work practice standard to require the use of natural gas (or equivalent fuel) at all times. After consideration of the comment, under CAA section 112(d)(6), we are removing the allowance to use alternative fuels during periods of natural gas supply curtailment or interruption from the natural gas fuel requirement as explained in section IV.B.3 of this preamble. This finalized amendment applies to existing clay refractory products kilns and new or existing chromium refractory products kilns and reflects a development in our understanding of refractory kiln fuel combustion technology since promulgation of the original standard.

Finally, as part of the technology review, we identified regulatory gaps (previously unregulated processes or pollutants) and are establishing new standards to fill those gaps as described in section III.C of this preamble.

C. What are the final rule amendments pursuant to CAA sections 112(d)(2) and (3) for the Refractory Products Manufacturing source category?

We determined that there are previously unregulated HAP for existing sources in the clay and nonclay refractory subcategories that warrant revisions to the MACT standards for this source category. Therefore, pursuant to the requirements of CAA section 112(d)(2) and (3) we proposed revisions to the MACT standards to include the following:

- New emission limits for particulate matter (PM) as a surrogate for non-mercury (non-Hg) metal HAP and mercury (Hg) for existing clay refractory product kilns, and
- the requirement to use natural gas as fuel, or an equivalent fuel, as the kiln fuel for new and existing curing ovens, shape dryers, and kilns that are used to process refractory products that use organic HAP (*i.e.,* nonclay refractory product sources), except during periods of natural gas supply interruption or curtailment.

As noted in section III.B of this preamble, the EPA received a comment during the comment period that caused us to review the fuel combustion technology used for all refractory

products sources in the source category. Based on that review, we are not finalizing the proposed allowance to use alternative fuels during periods of natural gas supply interruption or curtailment from the natural gas fuel requirement for new and existing nonclay sources. Therefore, we are finalizing the new emission limits for PM (as a surrogate for non-Hg metal HAP) and Hg for existing clay refractory product kilns, as proposed, and we are finalizing a revised requirement to use natural gas, or an equivalent fuel, as the fuel for new and existing nonclay sources, as a result of comments, under CAA section 112(d)(2) and (3) for subpart SSSSS in this action.

D. What are the final rule amendments addressing emissions during periods of startup, shutdown, and malfunction?

We are finalizing the proposed amendments to the Refractory Products Manufacturing NESHAP to eliminate the SSM exemption. Consistent with *Sierra Club* v. *EPA,* 551 F. 3d 1019 (D.C. Cir. 2008), the EPA is establishing standards in these rules that apply at all times. As detailed in section IV.E of the proposal preamble (86 FR 3099, January 14, 2021), Table 11 to subpart SSSSS of part 63 (General Provisions applicability table) is being revised to change several references related to the provisions that apply during periods of SSM. We also eliminated or revised certain recordkeeping and reporting requirements related to the eliminated SSM exemption. The EPA also made other harmonizing changes to remove or modify inappropriate, unnecessary, or redundant language in the absence of the SSM exemption. We determined that facilities in this source category can meet the applicable emission standards at all times, including periods of startup and shutdown. Therefore, the EPA determined that no additional standards are needed to address emissions during these periods. The legal rationale and explanation of the changes for SSM periods are set forth in the proposed rule. See 86 FR 3079, 3099–3102. Further, the EPA did not propose and is not promulgating standards for malfunctions in this final action. As discussed in section IV.E of the January 14, 2021, proposal preamble, the EPA interprets CAA section 112 as not requiring emissions that occur during periods of malfunction to be factored into development of CAA section 112 standards, although the EPA has the discretion to set standards for malfunctions where feasible. For the Refractory Products Manufacturing source category, it is unlikely that a malfunction would result in a violation of the standards, and no comments or information were submitted during the comment period that support a contrary conclusion. Refer to section IV.E of the January 14, 2021 proposal preamble for further discussion of the EPA's rationale for the decision not to set standards for malfunction events, as well as a discussion of the actions a source could take in the unlikely event that a source fails to comply with the applicable CAA section 112(d) standards as a result of a malfunction event, given that administrative and judicial procedures for addressing exceedances of the standards fully recognize that violations may occur despite good faith efforts to comply.

E. What other changes have been made to the NESHAP?

In addition to the changes described above we are finalizing other proposed amendments for the Refractory Products Manufacturing NESHAP related to electronic reporting, test methods and minor technical and editorial revisions, as described below.

To increase the ease and efficiency of data submittal and data accessibility, we are finalizing the proposed requirement that owners and operators of facilities in the Refractory Products Manufacturing source category submit electronic copies of required NOCS reports, performance test results, and performance evaluation results through the EPA's Central Data Exchange (CDX) website using an electronic performance test report tool called the Electronic Reporting Tool (ERT). We also are finalizing, as proposed, provisions that allow facility operators the ability to seek extensions for submitting electronic reports for circumstances beyond the control of the facility, *i.e.,* for a possible outage in the CDX or Compliance and Emissions Data Reporting Interface (CEDRI) or for a *force majeure* event in the time just prior to a report's due date, as well as the process to assert such a claim.

We are also finalizing the proposed additional and updated test methods and an EPA guidance document that are incorporated by reference. In accordance with requirements of 1 CFR 51.5, the EPA is incorporating by reference the following documents described in the amendments to 40 CFR 63.14:

- ANSI/ASME PTC 19.10–1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], issued August 31, 1981, IBR approved for Table 4 to subpart SSSSS.
- ASTM D6348–12e1, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, Approved February 1, 2012, IBR approved for Table 4 to subpart SSSSS.
- ASTM D6784–16, ''Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method),'' (Approved March 1, 2016), IBR approved for Table 4 to subpart SSSSS.
- EPA–454/R–98–015, Office of Air Quality Planning and Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, September 1997, IBR approved for 40 CFR 63.9804(f)(1). This document provides guidance on the use of triboelectric monitors as fabric filter bag leak detectors.

In addition, we are finalizing the following proposed technical and editorial corrections:

- Revise 40 CFR 63.9824 and Table 4 to subpart SSSSS of part 63 to clarify the location in 40 CFR part 60 of applicable EPA test methods; and
- Revise 40 CFR 63.9814 and 63.9816 to include the requirements to record and report information on failures to meet the applicable standard.

Finally, although not addressed in the proposal, we are amending 40 CFR 63.9804(e)(1) to correct a spelling error.

F. What are the effective and compliance dates of the standards?

The revisions to the MACT standards for the Refractory Products Manufacturing source category being promulgated in this action are effective on November 19, 2021. New sources must comply with all of the standards immediately upon the effective date of the standard, November 19, 2021, or upon startup, whichever is later.

The compliance dates for existing affected sources are listed below. Existing affected sources must continue to meet the current requirements of 40 CFR part 63, subpart SSSSS, until the applicable compliance date.

The compliance date for existing affected nonclay sources to comply with the work practice to use natural gas as fuel, or an equivalent fuel, as the kiln fuel at all times, including periods of natural gas supply interruption or curtailment is November 19, 2021. The compliance date for existing affected sources to comply with the electronic reporting requirement for NOCS reports, performance test results, and performance evaluation results is May 19, 2022. The compliance date for existing affected sources with continuous kilns using THC emission control devices to comply with the amended work practice standards (*i.e.,* limit the total number of hours for

bypass of the control device for during scheduled maintenance to 750 hours per year per kiln; maintain the organic HAP processing rate below the average rate based on production or below the lowest hourly rate during the most recent performance test, whichever is lower; update the operation, maintenance, and monitoring (OM&M) plan; include the required information in the semi-annual compliance report) is May 19, 2022. The compliance date for existing affected clay refractory product kilns to comply with the new limits for PM (as a surrogate for non-Hg metal HAP) and Hg is November 20, 2022. The compliance date for existing affected sources to comply with the SSM revisions, in accordance with the SSM court decision, is May 19, 2022.

We determined that an immediate compliance date is practicable for the natural gas requirement and is based on current practices and other information provided by the facilities. We are finalizing the 181-day compliance date for electronic reporting and the scheduled maintenance work practice to require facilities to implement these changes as expeditiously as practicable. For electronic reporting, our experience with similar industries that are required to convert reporting mechanisms to install necessary hardware and software, become familiar with the process of submitting performance test results electronically through the EPA's CEDRI, test these new electronic submission capabilities, and reliably employ electronic reporting shows that a time period of a minimum of 90 days, and, more typically, 180 days, is generally necessary to successfully accomplish these revisions. For the improved scheduled maintenance work practice, we expect facilities would also need this time to seek approval from the Administrator before taking the control device on the affected kiln out of service for scheduled maintenance and update their operation, maintenance, and monitoring plan to reflect the revised requirements. For the new PM (as a surrogate for non-Hg metal HAP) and Hg requirements, we determined the one-year compliance date would provide existing clay sources with sufficient time to plan and schedule facility resources to meet the notification and compliance demonstration testing requirements associated with the new limits. For the SSM changes, excluding the revised requirements for the SSM described above (40 CFR 63.6(f)(1)), our experience with similar industries further shows that this sort of regulated facility generally requires a time period of 181 days to read and understand the amended rule requirements and make any necessary operational adjustments, adjustments to recordkeeping and reporting systems, and/or updates to OM&M plans to reflect the revised requirements.

During proposal we requested information from sources in this source category regarding specific actions that would need to be undertaken to comply with the proposed amended requirements and the time needed to make the adjustments for compliance with any of the revised requirements. No comments or information were submitted during the comment period that support a contrary conclusion; therefore, we are finalizing these compliance dates as proposed.

IV. What is the rationale for our final decisions and amendments for the Refractory Products Manufacturing source category?

For each issue, this section provides a description of what we proposed and what we are finalizing for the issue, the EPA's rationale for the final decisions and amendments, and a summary of key comments and responses. For all comments not discussed in this preamble, comment summaries and the EPA's responses can be found in the comment summary and response document, *Summary of Public Comments and Responses on Proposed Rule: National Emission Standards for HAP for Refractory Products Manufacturing (40 CFR part 63, subpart SSSSS), Residual Risk and Technology Review, Final Amendments,* available in the docket.

A. Residual Risk Review for the Refractory Products Manufacturing Source Category

1. What did we propose pursuant to CAA section 112(f) for the Refractory Products Manufacturing source category?

Pursuant to CAA section 112(f), the EPA conducted a residual risk review and presented the results of this review, along with our proposed decisions regarding risk acceptability and ample margin of safety, in section IV.B of the proposed rule preamble (86 FR 3095, January 14, 2021). The results of this review are presented briefly below in Table 1 of this preamble. Additional detail is provided in the residual risk technical support document titled, *Residual Risk Assessment for the Refractory Products Manufacturing Source Category in Support of the 2020 Risk and Technology Review Proposed Rule,* which is available in the Refractory Products Manufacturing docket (Docket Item No. EPA–HQ–OAR–2020–0148–0013).

TABLE 1—REFRACTORY PRODUCTS MANUFACTURING SOURCE CATEGORY INHALATION RISK ASSESSMENT RESULTS

Risk assessment	Maximum individual cancer risk (in 1 million)		Estimated population at increased risk of cancer ≥1-in-1 million		Estimated annual cancer incidence (cases per year)		Maximum chronic noncancer target organ specific hazard index (TOSHI) [1]		Maximum screening acute noncancer HQ [2]
	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions	Based on allowable emissions	Based on actual emissions
Source Category	0.7	0.7	0	0	0.0003	0.0003	0.04	0.04	HQREL = 0.09
Whole Facility	0.7	.....	0	.....	0.0004	.....	0.04	.....	

[1] The TOSHI is the sum of the chronic noncancer hazard quotients (HQ) for substances that affect the same target organ or organ system.
[2] The maximum estimated acute exposure concentration was divided by available short-term threshold values to develop HQ values.

The results of the proposed inhalation risk modeling, as shown in Table 1 of this preamble, indicate that the maximum individual cancer risk based on actual and allowable emissions (lifetime) is 0.7-in-1 million (driven by trace amounts of chromium, arsenic, nickel and cadmium emissions from tunnel kilns), the maximum chronic noncancer TOSHI value based on actual and allowable emissions is 0.04 (driven by HF from tunnel kilns), and the maximum screening acute noncancer HQ value (off-facility site) is 0.09 (driven by HF). At proposal, the total annual cancer incidence (national) from these facilities based on actual and allowable emission levels was estimated

to be 0.0003 excess cancer cases per year or one case every 3,333 years. The maximum individual cancer risk (lifetime) for the whole facility was determined to be 0.7-in-1 million at proposal, driven by chromium, arsenic, nickel and cadmium emissions from tunnel kilns. The total estimated cancer incidence from the whole facility was determined to be 0.0004 excess cancer cases per year, or one excess case in every 2,500 years. No people were estimated to have cancer risks above 1-in-1 million from exposure to HAP emitted from both MACT and non-MACT sources at the three facilities in this source category. The maximum facility-wide TOSHI for the source category was estimated to be 0.04, driven by HF emissions from tunnel kilns.

We also evaluated multipathway human health risk from the five PB–HAP that are emitted by sources within this source category (arsenic, cadmium, POM, Hg (divalent Hg and methyl mercury), and lead). We evaluated the cadmium emissions from these facilities and concluded this HAP did not exceed the Tier 1 multipathway screening value of 1 for cancer or noncancer. We also evaluated the arsenic, methyl mercury, and POM emissions and found these HAP caused an exceedance of the Tier 1 multipathway screening value of 1 for cancer. Therefore, we conducted a Tier 2 screening assessment for these HAP and concluded that emissions of arsenic, POM and methyl mercury from these facilities did not exceed the Tier 2 multipathway screening value of 1 for cancer. A Tier 2 noncancer screening assessment was also conducted for Hg emissions and resulted in a screening value less than 1. Based upon the results of the screening assessments no further screening or site-specific assessments were conducted for this source category.

In evaluating the potential for multipathway effects from emissions of lead, modeled maximum annual-average lead concentrations were compared to the National Ambient Air Quality Standards (NAAQS) for lead (0.15 μg/m^3). Results of this analysis confirmed that the NAAQS for lead would not be exceeded by any facility.

To evaluate the potential for adverse environmental effects, the EPA focuses on eight HAP, which are referred to as ''environmental HAP,'' in its screening assessment: Six PB–HAP and two acid gases. The PB–HAP emitted by sources in the category are arsenic compounds, cadmium compounds, POM, mercury (both inorganic mercury and methyl mercury), and lead compounds. The acid gases included in the screening assessment and emitted from the category are HCl and HF. In the Tier 1 screening analysis for PB–HAP (other than lead, which was evaluated differently), arsenic, cadmium, divalent mercury, and POM had no Tier 1 exceedances for any ecological benchmark. Methyl mercury emissions at one facility had a Tier 1 exceedance for the surface soil no-observed-adverse-effect-level (avian ground insectivores) by a maximum SV of 2. A Tier 2 screening assessment was performed for methyl mercury. Methyl mercury had no Tier 2 exceedances for any ecological benchmark. For lead, we did not estimate any exceedances of the secondary lead NAAQS.

Two acid gases are emitted by sources within this source category: HCl HF. We conducted a screening-level evaluation of the potential adverse environmental effects associated with emissions of HCl and HF and found that the average modeled concentration around each facility (*i.e.,* the average concentration of all off-site data points in the modeling domain) did not exceed any ecological benchmark. In addition, each individual modeled concentration of HCl (*i.e.,* each off-site data point in the modeling domain) was below the ecological benchmarks for all facilities. For HF, the maximum facility screening value (based on the average concentration of all off-site data points over the modeling domain) was well below 1 (0.007) and the maximum area that exceeded the ecological benchmark was only 0.002-percent of the modeled area. Based on the results of the environmental risk screening evaluation, we do not expect an adverse environmental effect as a result of HAP emissions from this source category.

We weighed all health risk factors, including those shown in Table 1 of this preamble, in our risk acceptability determination and proposed that the residual risks from the Refractory Products Manufacturing source category are acceptable (section IV.C of the proposed rule preamble, 86 FR 3095, January 14, 2021). We then considered whether 40 CFR part 63, subpart SSSSS provides an ample margin of safety to protect public health and prevents, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. At proposal we determined there are no individuals in the exposed population with lifetime cancer risks above 1-in-1 million as a result of actual or allowable emissions from this category. In addition, in our risk analysis we did not identify a potential for adverse chronic noncancer, acute noncancer, or multipathway health effects. Therefore, we proposed the current standards provide an ample margin of safety to protect public health (section IV.C of the proposed rule preamble, 86 FR 3095, January 14, 2021).

2. How did the risk review change for the Refractory Products Manufacturing source category?

We have not changed any aspect of the risk assessment for this source category as a result of public comments received on the January 2021 proposal.

3. What key comments did we receive on the risk review, and what are our responses?

We received comments in support of and against the proposed residual risk review. Having carefully considered these comments, it is our determination that no revisions are warranted under CAA section 112(f)(2) for the Refractory Products Manufacturing source category. Generally, the comments that were not supportive of the risk review determination suggested changes to the underlying risk assessment methodology. For example, one commenter stated that the EPA should account for the increased risks due to exposure to multiple sources of HAP, use more health-protective dose-response values, and consider increased risks in childhood and from prenatal exposure. After review of all the comments received, we determined that no changes to our Science Advisory Board-approved review process were necessary. The comments and our specific responses can be found in the document, *Summary of Public Comments and Responses on Proposed Rule: National Emission Standards for HAP for Refractory Products Manufacturing (40 CFR part 63, subpart SSSSS), Residual Risk and Technology Review, Final Amendments,* available in the docket for this action (Docket ID No. EPA–HQ–OAR–2020–0148).

4. What is the rationale for our final approach and final decisions for the risk review?

As noted in our proposal, the EPA sets standards under CAA section 112(f)(2) using ''a two-step standard-setting approach, with an analytical first step to determine an 'acceptable risk' that considers all health information, including risk estimation uncertainty, and includes a presumptive limit on the maximum individual risk (MIR) of ''approximately 1-in-10 thousand'' (see 54 FR 38045, September 14, 1989). We weigh all health risk factors in our risk acceptability determination, including the cancer MIR, cancer incidence, the maximum cancer TOSHI, the maximum acute noncancer HQ, the extent of

noncancer risks, the distribution of cancer and noncancer risks in the exposed population, and the risk estimation uncertainties.

Since proposal, neither the risk assessment nor our determinations regarding risk acceptability, ample margin of safety, or adverse environmental effects have changed. For the reasons explained in the proposed rule, we have determined that the risks from the Refractory Products Manufacturing source category are acceptable, and that the current standards provide an ample margin of safety to protect public health and prevent an adverse environmental effect. Therefore, we are not revising the subpart to require additional controls pursuant to CAA section 112(f)(2) based on the residual risk review, and we are readopting the existing standards under CAA section 112(f)(2).

B. Technology Review for the Refractory Products Manufacturing Source Category

1. What did we propose pursuant to CAA section 112(d)(6) for the Refractory Products Manufacturing source category?

Based on our technology review, we proposed improvements to the existing underlying work practices as required by CAA section 112(d)(6) during scheduled maintenance of THC control devices. These revisions are necessary to reflect technical developments in pollution control practices since the promulgation of the original standard for this source category and reflect the best practices of one affected facility. Specifically, for affected continuous kilns using THC emission control devices, we proposed to limit the number of hours for bypass of the control device to conduct scheduled maintenance, schedule the manufacture of product with binder applicability of the standard to THC emission control devices, limit the number of hours for percentages at the lower end of the range produced during periods of control device bypass. We also proposed to include the THC emissions for these periods in the semi-annual compliance report. A brief summary of the EPA's findings in conducting the technology review of refractory products manufacturing operations was included in the preamble to the proposed rule (86 FR 3095, January 14, 2021), and a detailed discussion of the EPA's technology review and findings was included in the memorandum, *Technology Review for the Refractory Products Manufacturing NESHAP,* available in the docket for this action (Docket Item No. EPA–HQ–OAR–2020–0148–0008).

2. How did the technology review change for the Refractory Products Manufacturing source category?

For the final rule, we revised aspects of two work practice standards from the proposal, based on public comments. First, we are finalizing slightly different improvements than proposed for the work practice standard that applies when a continuous kiln THC control device is bypassed for scheduled maintenance. In particular, to demonstrate compliance with the requirement in 40 CFR 63.9792(e)(2) to minimize HAP emissions during the period when the kiln is operating and the control device is out of service, the owner or operator will be required to maintain the organic HAP processing rate (lb/hr) below either the average organic HAP processing rate based on the actual production on a 6-month rolling basis (not to include periods of kiln shut down) or the HAP processing rate (lb/hr) that coincides with the lowest hour of the most recent 3-hour performance test, whichever is lower. This requirement replaces the proposed limitation of five kiln cars with products for which the mass fraction of organic HAP in the resins, binders, and additives is greater than the average for the year. Second, we are revising the work practice standard to use natural gas, or equivalent, as the kiln fuel by removing the exception for periods of natural gas curtailment or supply interruption.

3. What key comments did we receive on the technology review, and what are our responses?

We received both supportive and adverse comments on various aspects of our technology review for refractory products manufacturing. The key comments and responses are provided in this section; summaries of comments not discussed in this preamble and the EPA's responses can be found in the comment summary and response document, available in the docket.

Comment: One commenter provided technical comments on the specific provisions that the EPA proposed to limit production during periods when the THC control device is being bypassed for maintenance. The proposed provisions would have required manufacturing mostly product in the tunnel kiln that contains a mass fraction of organic HAP in the resins, binders, and additives that is less than the average organic HAP mass fraction of these constituents for the year (on a 12-month rolling basis), and manufacture of the product with an organic HAP mass fraction greater than the average for the year would be limited to only five kiln cars during such maintenance periods.

The commenter explained that tunnel kilns comprise a preheating zone, firing zone, and cooling zone in sequence with kiln cars passing through the system containing pressed/formed refractory. Each kiln is designed to hold a set number of kiln cars in the preheating zone position and a separate set number of kiln cars in the firing zone position. The type and amount of resins, binders, and additives in the kiln are dictated by each product type's formulation. During drying in the tunnel kilns, organic HAP in resins, binders, and additives is volatilized and either destroyed in the tunnel kiln or exhausted to a THC control device for destruction.

The commenter noted that according to the memorandum *Technology Review for the Refractory Products Manufacturing NESHAP,* available in the docket for this action (Docket Item No. EPA–HQ–OAR–2020–0148–0008), these proposed provisions are based on the facility's specific internal operation procedures for the regenerative thermal oxidizer (RTO) unit that state that tunnel kiln batches exceeding 90 binder counts can only be pushed in a train of ''five cars or less.'' The commenter asserted that the EPA has catered the five-kiln car provision too specifically to the facility's one tunnel kiln due to extremely limited data, as the facility is the only U.S. nonclay refractory producer using organic binder and a THC control device. The commenter further stated that these procedures only address one of the two continuous kilns at the facility. The commenter also stated that since kiln cars can hold a variety of refractory products of varying dimensions and formulation, the mass of organic HAP emissions from the resins, binders, and additives from car to car is variable. The commenter noted that a new nonclay refractory tunnel kiln could potentially be constructed with larger kiln cars, such that each kiln car could be designed to hold a greater mass of nonclay refractory and emit much more organic HAP while still satisfying the proposed provisions during periods of control device maintenance.

The commenter suggested that instead the proposed requirements that apply during THC control device bypass for continuous kilns should be amended to reflect a more universal operating parameter limit (OPL). The OPL is established during performance testing in accordance with 40 CFR 63.9800 and Table 4 to subpart SSSSS. Each

continuous unit is required to establish a 3-hour block operating limit for maximum allowable organic HAP processing rate, which is calculated as the average organic HAP processing rate from performance testing plus 10 percent in accordance with 40 CFR 63.9798(c) and EPA guidance. The commenter suggested that the organic HAP processing rate during THC control device bypass be limited to the average organic HAP processing rate from the most recent performance test demonstration, as determined on an hourly basis (*i.e.,* 1-hour block average). The commenter also provided suggested revisions to the regulatory language to implement this suggestion.

Response: The EPA proposed an improved work practice standard to further minimize emissions during periods of scheduled maintenance and bypass of the thermal oxidizer as a result of the CAA section 112(d)(6) technology review process. In addition to the current work practice to minimize emissions during these periods, we proposed other measures based on the best practices of one facility. These included: (1) Limiting the applicability to THC control devices; (2) an annual limit on the number of hours for bypass of the control device; (3) the requirement to process product containing lower percentages of organic HAP content in the resins, binders and additives (less than the average organic HAP mass fraction); (4) an allowance for the processing of five kiln cars per year with greater than average organic HAP mass fraction; and (5) reporting of the mass of organic HAP emissions for bypass periods in the semi-annual compliance report.

As a result of the comments regarding these proposed measures, we learned we did not have full knowledge of the details of the facility's internal operating procedures during scheduled maintenance and bypass of the thermal oxidizer. As the commenter clarified, tunnel kiln batches exceeding 90 binder counts (a measure of the volume of binder) can only be pushed in a train of ''five cars or less'' during these periods. The commenter also clarified this procedure applies to only one of the two continuous tunnel kilns. We agree with the commenter that using the ''kiln car'' limitation is an imprecise way of limiting organic HAP emissions due to the potential variation in kiln car size. However, the EPA found the facility's suggestion to set an operating limit during bypass periods equal to the ''average organic HAP processing rate from the most recent performance test, as determined on an hourly basis (1-hour block average)'' and rule language edits to be inconsistent with other rule requirements. Specifically, because performance tests are required to be conducted while the source is operating at the maximum organic HAP processing rate as defined in § 63.9824, we found this suggestion to be inconsistent with the rule requirement to minimize emissions during control device bypass and maintenance required by § 63.9792(e)(2).

We are therefore finalizing revisions to the proposed revised work practice standard that reflect additional improvements as a result of these comments and follow-up discussions with the facility to clarify their best practices. Specifically, we are revising the proposed work practice to limit the organic HAP processing rate rather than the organic HAP content during control device bypass and maintenance as proposed. The proposed rule language that required the facility to minimize HAP emissions during the period when the kiln is operating and the control device is out of service by ''scheduling of the manufacture of product for which the mass fraction of organic HAP in the resins, binders, and additives is at the lower end of the range produced (*i.e.,* below the typical average mass fraction of organic HAP in the resins, binders, and additives)'' is revised to ''maintaining the organic HAP processing rate (lb/hr) below the average organic HAP processing rate based on actual production on a 6-month rolling basis (not to include periods of kiln shut down) or below the organic HAP processing rate (lb/hr) that coincides with the lowest hour of the most recent 3-hour performance test, whichever is lower.'' We are then requiring sources to demonstrate compliance with the requirement to minimize emissions by maintaining the organic HAP processing rate (lb/hr) during control device maintenance and bypass below lower of the two organic HAP processing rates described above. We are also revising the proposed reporting requirements to reflect these changes. In addition, we are removing the allowance for the processing of five kiln cars per year with greater than average organic HAP mass fraction from the work practice. Changing the work practice requirement from the mass fraction of organic HAP in the product to the HAP processing rate while also removing the reference to kiln cars provides a clearer and more consistent metric for demonstrating that HAP emissions have been minimized and provides the facility with options for minimizing emissions during the period when the kiln is operating and the control device is out of service (*e.g.,* loading kiln cars with products with lower HAP contents, reducing the number of kiln cars pushed through the kiln per hour).

In summary, the finalized work practice standard for periods of control device maintenance and bypass includes: (1) The proposed limit of the applicability to THC control devices; (2) the proposed annual limit on the number of hours for bypass of the control device; (3) the revised requirement to maintain the organic HAP processing rate below the average organic HAP processing rate, determined as the lower of either (a) the average organic HAP processing rate (lb/hr) based on actual production on a 6-month rolling basis, not to include periods of kiln shut down) or (b) the organic HAP processing rate determined during the lowest hour of the most recent performance test; and (4) semiannual compliance reporting of the following information: The average organic HAP processing rate based on actual production on a 6-month rolling basis (not to include periods of kiln shut down) or the lowest hour from the most recent performance test (whichever is lower), the actual organic HAP processing rate, the amount of product produced and the mass of organic HAP in the product produced, the estimated THC emissions, the number of hours the control device was bypassed during the compliance period (as proposed), and the cumulative number of hours the control device was bypassed over the last 12-month period (as proposed). The final improvement of the work practice standard as a result of the CAA section 112(d)(6) technology review process does not include the proposed allowance for processing of five kiln cars per year with greater than average organic HAP mass fraction during control device maintenance and bypass.

Meeting minutes from the discussion with the facility and follow-up emails are included in the rulemaking docket (Docket ID No. EPA–HQ–OAR–2020–0148).

Comment: One commenter noted that the EPA proposed to limit the number of hours during which a continuous kiln is operating and the THC control device is bypassed for maintenance to 750 hours per year on a 12-month rolling basis. The commenter noted that the EPA identified this provision as an improvement to the current standard since there is no limit on the total amount of time the provision may be used other than the requirement for the owner or operator to minimize the amount of time for each bypass.

The commenter also noted that per proposed requirements in 40 CFR

63.9792(e) and 63.9812(g), kiln operation during bypass of the THC control device requires advanced approval from the Administrator (86 FR 3079, 3099, January 14, 2021). The commenter noted that the EPA also proposed that affected sources must document the planned maintenance procedures in the OM&M plan, and the proposed requirement in 40 CFR 63.9814(c)(7) would require reporting in the semi-annual compliance report for these periods, including a statement of whether or not the control device maintenance was included in the approved request to bypass the control device while scheduled maintenance is performed. The EPA has proposed to allow 181 days for compliance with the proposed revisions, noting that this time would be used to update the OM&M plans and seek approval from the Administrator before taking the control device on the affected kiln out of service for scheduled maintenance.

The commenter stated that the proposed requirement for Administrator approval is based on its current state-issued title V permit. The commenter noted that the state has delegated authority and is the ''Administrator'' in regard to implementing and enforcing the NESHAP requirements at 40 CFR part 63. The commenter clarified that the current title V permit requires advance notification via email to the state air quality inspector and to the Regional Air Quality staff that the RTO will be out of service for scheduled maintenance, but the permit does not include approval requirements. In addition, the commenter stated that the EPA did not differentiate between THC control device planned and unplanned maintenance and did not specify the scope of maintenance (*e.g.,* washdowns, bakeouts, media placement) to be documented in the OM&M plan. Because the proposed provisions require approval from the Administrator in advance, the commenter noted that it appears kiln operation during unplanned maintenance events is not addressed.

The commenter requested that the EPA amend 40 CFR 63.9792(e), 63.9812(g), 63.9814(c)(7), Table 3, and Table 9 to specify that kiln operation during periods of control device maintenance requires ''Administrator notification'' and not ''Administrator approval.'' The commenter suggested that the notification could include a telephone call or email to the Administrator within 24 hours of a bypass event. The commenter asserted that this provision would allow for unplanned/emergency maintenance, which is common for continuous process units, particularly where facilities operate 24 hours a day, 365 days a year. Additionally, requiring notification rather than approval for each bypass allows facilities to avoid complete shutdown of a process unit if the Administrator cannot be reached for approval (*e.g.,* control device requires unplanned maintenance at 3 a.m. on Saturday and Administrator cannot be reached until 9 a.m. Monday). The commenter noted that the EPA's proposed recordkeeping and reporting requirements related to the 750-hour (12-month rolling basis) limit on use of the bypass provisions would still adequately qualify these bypasses with Administrator notification versus approval. The commenter also asserted that requiring notification instead of approval does not restore ''malfunction'' provisions, as the term is defined under 40 CFR 63.2, as the bypass period is limited to 750 hours per year (12-month rolling basis). Also, per *U.S. Sugar Corp.* v. *EPA,* 830 F.3d 579, 606–610 (2016), the Administrator may determine whether the facility took good faith efforts to minimize resulting emissions including preventative and corrective actions and whether excess emissions were caused by poor maintenance or careless operation.

Response: The EPA disagrees with the commenter's characterization of the proposed requirements in 40 CFR 63.9792(e) and 63.9812(g), regarding kiln operation during bypass of the THC control device and advanced approval from the Administrator (86 FR 3099, January 14, 2021). The EPA agrees these citations pertain to kiln operation during bypass of the THC control device and advanced approval from the Administrator, but these provisions are original rule requirements that were not proposed to be amended. The original general requirements for complying with subpart SSSSS are contained in 40 CFR 63.9792, and 40 CFR 63.9792(e) specifically permits the continued operation of a continuous kiln during bypass and scheduled maintenance of the control device for that kiln, provided the owner or operator meets the requirements of the work practice standard and requests and receives approval by the Administrator per 40 CFR 63.9792(e)(1), which requires a separate request each time the owner or operator plans to bypass the control device for scheduled maintenance. Similarly, the original requirements for notifications for subpart SSSSS are contained in 40 CFR 63.9812, and 40 CFR 63.9812(g) specifically states that owner and operators must request approval from the Administrator before bypassing the control device, as specified in 40 CFR 63.9792(e), and that a separate request must be submitted for approval each time.

We also disagree with the statement that the EPA proposed a new requirement that affected sources must document the planned maintenance procedures in the OM&M plan, as this requirement was also required in the original rule at 40 CFR 63.9794(a)(6). The provisions in 40 CFR 63.9794(a)(6) pertain to any maintenance that requires use of the bypass provisions. The provision includes ''procedures for the proper operation and routine and long-term maintenance of each process unit and [air pollution control device],'' which encompasses the more specific types of maintenance described by the commenter (*e.g.,* washdowns, bakeouts, media placement). Further, subpart SSSSS does not include the terms ''planned maintenance'' or ''unplanned maintenance,'' nor does it define ''scheduled maintenance.'' However, as noted earlier in this response, a request for Administrator approval must be submitted each time the owner or operator plans to bypass the control device for ''scheduled maintenance,'' and per Table 2 to subpart SSSSS, the owner or operator must receive approval from the Administrator before taking the control device on the affected kiln out of service for scheduled maintenance.

After review of the commenter's request, we are not amending the requirements to request Administrator approval, and we also disagree with the comment that there is a need to differentiate between THC control device ''planned and unplanned maintenance'' within subpart SSSSS. The EPA did not propose to amend the requirement to request Administrator approval each time an owner or operator plans to bypass the control device, and we conclude that allowing notification rather than approval would not be an improvement to the standard. In particular, if owners and operators were allowed to comply with the work practice standard during periods of maintenance that are only ''scheduled'' a few hours in advance of the control device bypass, those owners and operators would likely find it very challenging to comply with all the specific requirements that must be met during bypass to demonstrate compliance with the requirement in 40 CFR 63.9792(e)(2) to minimize HAP emissions during the bypass. Therefore, the work practice standard we are finalizing for periods of control device bypass and scheduled maintenance applies to all THC control device bypasses for scheduled maintenance for

which the owner or operator receives approval from the Administrator. Most of the maintenance activities described by the commenter are likely to be considered ''scheduled maintenance'' for which the owner or operator will be able to request advanced approval from the Administrator before the control device is bypassed. These maintenance activities are the activities that should be documented in the OM&M plan. Bypass of the control device without Administrator approval would be considered a deviation from the standard.

Finally, the EPA agrees with the commenter that the state has delegated authority and is the ''Administrator'' with regard to implementing and enforcing the 40 CFR subpart SSSSS requirements. However, the state does not have the authority to set standards less stringent than those promulgated by the Administrator in accordance with CAA section 112(l). Therefore, in order for the current title V permit to satisfy the 40 CFR 63.9792(e) and 63.9812(g) requirements, it must require advance approval by the Administrator and not the less stringent notification requirements.

Comment: One commenter stated that the EPA must remove the alternative fuel allowance provision. The commenter noted that the existing standards contain a provision allowing for ''the use of alternative fuels'' (such as fuel oil, propane, and pulverized coal) during certain circumstances as an exception to the work practice standard that requires use of natural gas as the core emission control requirement. The commenter noted that the EPA has recognized this provision allows for an exception from the standards in ''situations analogous to malfunctions'' and explained in 2003 that its justification for this provision was similar to the SSM exemption. At the time, the EPA stated that, ''Just as an exceedance of emission limits during a malfunction is not considered a violation, as indicated in 40 CFR 63.6(f)(1) and (h)(1), we believe that using other fuels during periods when natural gas is unavailable should also not be considered a violation of the work practice standard for clay and chromium refractory products kilns'' (68 FR 18740, April 16, 2003).

The commenter stated that to the extent that the EPA retains this work practice standard as the sole or an additional control, it must remove the illegal alternative fuel allowance provision. The commenter further stated that including this provision means that the emission standard (*i.e.,* the fuel requirement) is not ''continuous'' and does not apply at all times, which is a violation of CAA sections 302(k) and 112. The commenter asserted that the EPA should recognize this allowance is as unlawful as the SSM exemption that it has recognized the need to remove (*Sierra Club,* 551 F.3d at 1022), and therefore the EPA should remove this specific malfunction exemption as well. Failing to do so would violate CAA section 112(d)(6), by refusing to make a ''necessary'' revision to assure compliance with the CAA, and it would be arbitrary because it would leave in place a harmful exemption that allows the release of more pollution than CAA section 112 allows, based on the illegal justification of a ''malfunction.'' In this instance, the commenter noted, such a ''malfunction'' may simply be an increase in natural gas prices, making this allowance particularly arbitrary because it conflicts with the CAA's public health objective and the floor requirement to assure emission standards based on the ''achieved'' emission reductions, without consideration of cost.

Response: The EPA agrees with the commenter that the existing standards require the use of natural gas or equivalent fuel. It also allows ''the use of alternative fuels'' during ''periods of natural gas curtailment or supply interruption'' as defined in 40 CFR 63.9824. Propane is considered to be a fuel that is equivalent to natural gas, not an alternative fuel, as stated by the commenter.

The current rule requirements related to alternative fuel usage state that procedures for alternative fuel usage must be included in the OM&M plan per 40 CFR 63.9794(a)(10)(i), require notification of alternative fuel usage within 48 hours of the declaration of a period of natural gas curtailment or supply interruption per 40 CFR 63.9812(f), and reporting of termination of alternative fuel usage within 10 working days per 40 CFR 63.9814. The ''period of natural gas curtailment or supply interruption'' is defined in 40 CFR 63.9824 as ''the period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.''

The alternative fuel allowance was added to the rule as a result of comments from the industry on the 2002 proposed rule, in which the EPA proposed the use of natural gas or other such clean fuel to prohibit the use of coal, fuel oil, waste oil, or equivalent fuels and the resulting emissions of HF, HCl or HAP metals from existing clay refractories (67 FR 42122, June 20, 2002). The EPA provided the justification for the allowance referenced by the commenter in the memo titled *Summary of Public Comments and Responses on the Proposed NESHAP for Refractory Products Manufacturing* (Docket ID OAR–2002–0088, Item No. V–C–01, page 12). Industry stakeholders opposed the 2002 proposed work practice that required use of natural gas, stating that many kilns were designed to use fuels other than natural gas and the need to use these alternative fuels arises during natural gas shortages or price increases. They also stated that during natural gas shortages, residential users receive priority over industrial users of natural gas and that prohibiting the use of alternative fuels could adversely impact the viability of some refractory operations. After considering those comments, the EPA finalized the alternative fuel allowance (73 FR 18736, April 16, 2003). The EPA did not consider a price increase to be a justification for alternative fuel use at that time and omitted that reason from the natural gas curtailment definition. Contrary to the commenter's argument, this definition expressly states that an increase in natural gas prices does not constitute a period of natural gas curtailment or supply interruption, so the commenter's claim that such a ''malfunction'' may simply be an increase in natural gas prices is not valid.

We acknowledge much has changed since the original NESHAP was promulgated in 2003. For this final action, the facilities in the source category confirmed they use natural gas and propane during normal operations in accordance with the NESHAP and state requirements. In the event of a natural gas curtailment or supply interruption, they indicated they would not switch to another fuel due to the fuel-specific burner technology in use. They stated they would either continue to use equivalent fuel (propane backup) or shut down and retool their process units to use equivalent fuel (propane) or an alternative fuel (fuel oil) since they have no back-up supply of propane and it would likely also be curtailed due to demand. The EPA document titled *AP–42, Section 1.5 Liquified Petroleum Gas Combustion, updated July 2008,* further supports that response, explaining that burner design technology is specific to fuel type and that retooling may even be required when changing the fuel type from natural gas to propane. Retooling may include replacement of fuel injector

tips and/or vaporizers to provide burners with the proper fuel to air ratio. In addition, as noted previously in this preamble, there are no facilities currently subject to subpart SSSSS that manufacture chromium refractory products. Based on the changes in in kiln and burner design technologies since 2003, and on the determination that propane backup is available (or if retooling is required, retooling can be done for propane instead of other alternative fuels) for all existing sources subject to this standard and can be part of the design of new sources, we are removing the alternative fuel usage allowance. As a result, the use of alternative fuels will not be permitted and will be a deviation from the work practice standard, which will apply during normal operation as well as during periods of natural gas curtailment/supply interruption. The removal of the natural gas alternative fuel allowance and the requirement to use natural gas or equivalent fuels reflects a development in our understanding of refractory kiln fuel combustion technology since promulgation of the original standard.

4. What is the rationale for our final approach for the technology review?

For the reasons explained in the preamble to the proposed rule (86 FR 3095, January 14, 2021), we proposed amendments to improve the work practice standard that applies when a continuous kiln THC control device is bypassed for maintenance to reflect technical developments in pollution control practices since the promulgation of the original standard. We evaluated all of the comments received on these improvements and the EPA's proposed amendments, and for the reasons explained in the comment responses in section IV.B.3 of this preamble, we are finalizing amendments to the proposed work practice standard to further improve the work practices based on the best practices of one affected source in the source category. We are also finalizing amendments to the existing work practice standard that permits the use of alternative fuels when natural gas or equivalent fuel is not available, after review of the fuel combustion technology used by sources in the source category in response to public comments. Further explanation is included in the comment responses in section IV.B.3 of this preamble. The removal of the natural gas alternative fuel allowance and the requirement to use natural gas or equivalent fuels reflects a development in our understanding of refractory kiln fuel combustion technology since promulgation of the original standard.

C. CAA Sections 112(d)(2) and (3) Amendments for the Refractory Products Manufacturing Source Category

1. What amendments did we propose pursuant to 112(d)(2) and (3) for the Refractory Products Manufacturing source category?

In the January 14, 2021 action, we proposed amendments to the Refractory Products Manufacturing NESHAP to address previously unregulated HAP for affected sources in the clay and nonclay refractory subcategories pursuant to 112(d)(2) and (3).

a. Clay Refractory Sources

For new and existing clay refractory kilns, we proposed MACT floor limits for Hg and for PM (as a surrogate for non-Hg metal HAP), in addition to the current NESHAP requirements for clay refractory sources, based on emissions test data for existing clay refractory kilns. The emissions test data for existing clay kilns reviewed for this action confirmed trace (but measurable) amounts of non-Hg metal HAP and Hg emissions. As a result, we proposed MACT floor limits of 3.1 lb/hr for PM and 6.1 micrograms per dry standard cubic meter (μg/dscm), corrected to 18 percent oxygen, for Hg for each new kiln used to produce clay refractory products. We proposed MACT floor limits of 9.5 lb/hr for PM and 18 μg/dscm, corrected to 18 percent oxygen, for Hg for each existing kiln used to produce clay refractory products. Similar to other source categories, we proposed a limit for PM (as a surrogate for non-Hg metal HAP) because the metal HAP are contained in the PM and the control techniques that would be used to control PM will equally control non-Hg metal HAP. To demonstrate compliance with the emission limits, we proposed initial and repeat 5-year performance testing for the regulated pollutants, continuous parameter monitoring, and daily visible emissions (VE) checks. Owners and operators whose clay refractory products kilns are equipped with a fabric filter to reduce PM (as a surrogate for non-Hg metal HAP) have the option of demonstrating compliance using a bag leak detection (BLD) system instead of daily VE checks.

We also evaluated the beyond-the-floor option of requiring all existing sources to meet the proposed new source MACT standards for Hg and PM (as a surrogate for total non-Hg metal HAP). We concluded that the costs of the necessary controls were not reasonable relative to the level of emission reduction achieved for either the Hg or PM beyond-the-floor options. In addition, these controls would create additional solid waste, as there would be a need to dispose of the collected metal-contaminated dust. Therefore, we did not propose beyond-the-floor limits for Hg or PM. A brief discussion regarding the derivation of the Hg and PM limits and the beyond-the-floor option was included in the preamble to the proposed rule (86 FR 3095, January 14, 2021), and a detailed discussion is included in the technical memorandum titled *Development of Proposed Standards and Impacts for the Refractory Products Manufacturing NESHAP,* located in the docket for this action (Docket Item No. EPA–HQ–OAR–2020–0148–0014).

b. Nonclay Refractory Sources

For new and existing curing ovens, shape dryers, and kilns that are used to process refractory products that use organic HAP (*i.e.,* nonclay refractory sources), we proposed a work practice standard to use natural gas as fuel to limit metal HAP emissions (except during periods of natural gas curtailment or supply interruption) as provided in CAA section 112(h) in lieu of a numerical emissions standard, in addition to the current NESHAP THC limits for new and existing nonclay refractory sources. These sources currently employ the use of thermal oxidizers, regenerative thermal oxidizers and catalytic oxidizers to meet the THC limit, however, the NESHAP did not require sources to use natural gas as fuel for sources in this subcategory because the metal HAP emissions were determined to be below measurable quantities due to the use of purified nonclay raw materials. Available HAP data for these sources in the 2017 National Emission Inventory (NEI) were found to be outdated and not reflective of current operating conditions. The 2017 NEI included measurable PM emissions for these existing nonclay refractory sources, and the PM would be expected to have trace amounts of metal HAP; however, we have no emission stack test data to indicate measurable emissions of metal HAP for these existing nonclay refractory sources.[2] Therefore, as discussed in the preamble to the

[2] Thus, while we believe that there are metal HAP emissions, the lack of data showing measurable emissions leads the EPA to conclude that the application of measurement methodology to this class of sources is not practicable due to technological and economic limitations. *See* CAA 112(h)(2)(B).

proposed rule (86 FR 3095, January 14, 2021), we proposed a work practice standard to use natural gas as fuel for new and existing nonclay refractory sources to limit metal HAP emissions in lieu of a numerical emissions standard in accordance with CAA section 112(h).

2. How did the 112(d)(2) and (3) amendments change for the Refractory Products Manufacturing source category?

We are making one change to the proposed CAA section 112(d)(2) and (3) amendments. For each new kiln used to produce clay refractory products, we are finalizing the proposed MACT floor limits of 3.1 lb/hr for PM (as a surrogate for metal HAP) and 6.1 μg/dscm, corrected to 18 percent oxygen, for Hg. For each existing kiln used to produce clay refractory products, we are finalizing the proposed MACT floor limits of 9.5 lb/hr for PM (as a surrogate for metal HAP) and 18 μg/dscm, corrected to 18 percent oxygen, for Hg. We are also finalizing the proposed requirements for initial and repeat 5-year performance testing, continuous parameter monitoring, daily VE checks, and the option of demonstrating compliance using a BLD system instead of daily VE checks for clay refractory products kilns equipped with a fabric filter to reduce PM (as a surrogate for metal HAP). For each new and existing affected source used to produce nonclay refractory products, we are finalizing the work practice standard to use natural gas as fuel to limit metal HAP emissions as provided in CAA section 112(h) in lieu of a numerical emissions standard generally as proposed. However, based on the review of combustion technologies prompted by public comments on the existing work practice standard to use natural gas as fuel (see section IV.B.3 of this preamble), the finalized work practice for new and existing sources used to produce nonclay refractory products requires the use natural gas or an equivalent fuel at all times, without an exception during periods when natural gas is not available.

3. What key comments did we receive on the 112(d)(2) and (3) amendments and what are our responses?

We received one general comment supporting the proposed CAA section 112(d)(2) and (3) amendments for refractory products manufacturing. The comment letter also included recommendations for more stringent standards under CAA section 112(d)(2) and (3) for this source category.

Comment: One commenter supported the EPA's proposed decision to set numeric emission standards for Hg and for PM as a surrogate for non-Hg metal HAP for existing clay refractory sources. The commenter noted that setting limits for all unregulated sources of HAP emissions in this category is required by CAA section 112(d)(6) (see *LEAN* v. *EPA,* 955 F.3d 1088). However, the commenter asserted that the proposed limits are not strong enough to satisfy the CAA section 112(d)(2)–(3) requirements and that the standards must reflect the maximum achievable degree of emission limitation. First, the commenter stated that the limits were set using insufficient data and that it is not clear why the EPA did not use its authority under CAA section 114 to collect additional emission data. Second, the commenter stated that the ''upper prediction limit'' (UPL) methodology of setting standards is not consistent with the statutory requirement of the floor as the ''average emission limitation'' achieved by the best-performing sources, which violates CAA section 112(d)(3) and is arbitrary. Therefore, the commenter stated, the proposed standards do not come close to the ''maximum achievable'' degree of emission reduction.

Response: As courts have regularly upheld, the EPA has wide latitude in determining the extent of data gathering necessary to solve a problem and courts generally defer to the Agency's decision to proceed on the basis of imperfect scientific information, rather than to ''invest the resources to conduct the perfect study.'' *Sierra Club* v. *EPA,* 167 F. 3d 658, 662 (D.C. Cir. 1999)) (''If EPA were required to gather exhaustive data about a problem for which gathering such data is not yet feasible, the agency would be unable to act even if such inaction had potentially significant consequences . . . [A]n agency must make a judgment in the face of a known risk of unknown degree.'' *Mexichem Specialty Resins, Inc.,* 787 F.3d. 561 (D.C. Cir. 2015)).

Contrary to the commenter's assertion, the EPA had sufficient data available from the two clay refractory products kilns at Whitacre-Greer to calculate MACT floors, so additional data collection was not necessary. In the case of PM, multiple sets of emissions test data were available for each of the two kilns, allowing for a data set for each kiln that was robust enough that the EPA did not need to evaluate the uncertainty associated with a limited dataset for either kiln. Further, as noted in the memorandum *Emissions Data Used to Develop the Refractory Products Manufacturing Risk and Technology Review (RTR) Risk Modeling Input Files* (Docket Item No. EPA–HQ–OAR–2020–0148–0006), St. Gobain has three batch tunnel kilns and two continuous tunnel kilns capable of producing both clay and nonclay refractories, so they would be subject to the proposed standards for PM and Hg when producing clay refractories. However, 40 CFR 63.9824 defines a clay refractory product as ''a refractory product that contains at least 10 percent uncalcined clay by weight prior to firing in a kiln'' and includes six classifications of clay (ball clay, bentonite, common clay and shale, fire clay, fuller's earth, and kaolin). Based on the 2017 raw material information provided by St. Gobain when the EPA was developing the inputs file for the risk modeling, the quantities of clay fired do not meet the 10 percent threshold for the manufacture of clay refractories and are more consistent with the use of clay as a binder, so these kilns are expected to be subject to the clay refractory kiln standards infrequently. Therefore, it is not clear that using the authority under CAA section 114 for these kilns would have yielded any additional PM or Hg data for clay refractory kilns. In other words, if the EPA had requested emissions testing under CAA section 114 for these five kilns when they manufacture clay refractories, the EPA would have had to wait for the facility to change their product on each kiln, which may not have been feasible.

Regarding the UPL approach, in August 2013, the D.C. Circuit issued its decision in *National Association. of Clean Water Agencies (NACWA)* v. *EPA,* which addressed challenges to the EPA's 2011 Sewage Sludge Incinerator (SSI) rule, issued under section 129 of the CAA. In *NACWA* v. *EPA,* the court remanded the EPA's use of the UPL methodology to the Agency for further explanation of how the methodology reflected the average emissions limitation achieved by the best-performing 12 percent of sources (for existing sources) and the average emissions limitation achieved by the best-performing similar source (for new sources). *NACWA* v. *EPA,* 734 F.3d 1115, 1151. Because the UPL methodology used in the SSI rule was the same as that used in the major source Boiler MACT (40 CFR part 63, subpart DDDDD), the EPA requested a remand of the record in *U.S. Sugar* v. *EPA* in order to address the court's decision in *NACWA* v. *EPA.* The EPA prepared a memorandum explaining the methodology for the UPL. This memorandum, the EPA's *Response to Remand of the Record for Major Source Boilers,* provides a detailed rationale to use the UPL as the basis of setting a

MACT floor for new and existing sources, and the methodology and the explanation in the memorandum were upheld by the D.C. Circuit in *U.S. Sugar* v. *EPA,* 830 F.3d at 639. Following the UPL memorandum, the EPA issued a subsequent memorandum specifically addressing the application of the UPL methodology when setting MACT emission limits with limited datasets, *Approach for Applying the Upper Prediction Limit to Limited Datasets.* In that memorandum, the EPA concluded that there are additional considerations when setting MACT floors for limited datasets. The D.C. Circuit agreed that the EPA sufficiently explained the general application of the UPL approach to small datasets in *Sierra Club* v. *EPA,* 895 F.3d 1, 14 (D.C. Cir. 2018). The MACT floors were set consistent with EPA guidance and with previous court decisions.

4. What is the rationale for our final approach for the 112(d)(2) and (3) amendments?

For the reasons explained in the preamble to the proposed rule (86 FR 3095, January 14, 2021), and in the comment responses in sections IV.B.3 and IV.C.3 of this preamble and the comment summary and response document (available in the docket for this rulemaking), we are finalizing a work practice requirement to use natural gas at all times for new and existing clay refractory product sources, and we are making no changes and are finalizing the proposed 112(d)(2) and (3) amendments for clay refractory kilns in the Refractory Products Manufacturing source category.

D. SSM Amendments for the Refractory Products Manufacturing Source Category

1. What SSM amendments did we propose for the Refractory Products Manufacturing source category?

We proposed amendments to the Refractory Products Manufacturing NESHAP to remove and revise provisions related to SSM that are not consistent with the 2008 court decision that the standards apply at all times. More information concerning the elimination of SSM provisions is provided in the preamble to the proposed rule (86 FR 3095, January 14, 2021).

2. How did the SSM amendments change for the Refractory Products Manufacturing source category?

We are finalizing the SSM provisions as proposed with no changes (86 FR 3095, January 14, 2021).

3. What key comments did we receive on the SSM amendments and what are our responses?

We received one general comment supporting the proposed amendments to the SSM provisions for refractory products manufacturing and three comments requesting that the rule requirements for this source category apply at all times, not just during periods of SSM.

4. What is the rationale for our final approach for the SSM provisions?

For the reasons explained in the proposed rule and after evaluation of the comments on the proposed amendments to the SSM provisions for the Refractory Products Manufacturing NESHAP, we are finalizing the proposed amendments related to SSM that are not consistent with the requirement that the standards apply at all times. More information concerning the proposed amendments to the SSM provisions is in the preamble to the proposed rule (86 FR 3095, January 14, 2021).

E. Electronic Reporting Amendments for the Refractory Products Manufacturing Source Category

1. What electronic reporting amendments did we propose for the Refractory Products Manufacturing source category?

In the January 14, 2021, notice we proposed amendments to subpart SSSSS to require owners and operators of refractory product manufacturing facilities to submit electronic copies of NOCS reports, performance test results, and performance evaluation results through the EPA's CDX using CEDRI.

The proposed amendments apply to the NOCS required by 40 CFR 63.7(b) and (c), 40 CFR 63.8(f)(4), 40 CFR 63.9(b) through (e) and (h) and 40 CFR 63.9812, and performance test results and performance evaluation results required by 40 CFR 63.9(h), 40 CFR 63.9800, and 40 CFR 63.9814. The proposal would require that all NOCS be submitted as portable document format (PDF) files and uploaded to CEDRI. For performance test and performance evaluation results, the proposal would require test results that use test methods supported by the EPA's ERT listed on the ERT website[1] at the time of the test be submitted in the format generated through the use of the ERT or an electronic file consistent with the extensible markup language (XML) schema on the ERT website. Performance test results using test methods that are not supported by the ERT at the time of the test would be required to be submitted as a PDF file using the attachment module of the ERT. In addition, the proposal included two broad circumstances for electronic reporting extensions. A description of the electronic data submission process is provided in the memorandum *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for NESHAP Rules,* available in the docket for this action (Docket Item No. EPA–HQ–OAR–2020–0148–0003). The proposed rule requirements would replace the current rule requirements to submit the NOCS reports, performance test results, and performance evaluation results to the Administrator at the appropriate address listed in 40 CFR 63.13. The proposed rule requirement would not affect submittals required by state air agencies. The proposed compliance date for existing affected sources to comply with the electronic reporting requirements for NOCS reports, performance test results, and performance evaluation results is 181 days after the final rule is published to begin electronic reporting. New affected sources are required to comply with the electronic reporting requirements for NOCS reports, performance test results, and performance evaluation results on the effective date of the standard or upon startup, whichever is later.

2. How did the electronic reporting provisions change for the Refractory Products Manufacturing source category?

No changes were made to the proposed electronic reporting provisions.

3. What key comments did we receive on the electronic reporting provisions and what are our responses?

We received one comment letter that addressed the proposed electronic reporting provisions for refractory products manufacturing. The commenter generally supported the proposed amendments except for the proposed provisions of 40 CFR 63.9814(k) and (l) that would provide instructions for affected sources unable to submit an electronic report either due to a force majeure event or an outage of CEDRI.

4. What is the rationale for our final approach for the electronic reporting requirements?

For the reasons explained in the preamble to the proposed rule (86 FR 3095, January 14, 2021) and the comment summary and response document (available in the docket for this rulemaking), we are making no

changes and are finalizing the electronic reporting provisions as proposed.

F. Technical Amendments for the Refractory Products Manufacturing Source Category

In the final rule, we are amending 40 CFR 63.9824 and Table 4 to subpart SSSSS of part 63, as proposed, to clarify the location in 40 CFR part 60 of applicable EPA test methods. We are also amending 40 CFR 63.9814 and 63.9816 to include the requirements to record and report information on failures to meet the applicable standard.

In the final rule, as proposed, we are adding and updating test methods that are incorporated by reference. In accordance with requirements of 1 CFR part 51.5, the EPA is incorporating by reference the following voluntary consensus standards (VCS) described in the amendments to 40 CFR 63.14:

- ANSI/ASME PTC 19.10–1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], issued August 31, 1981, proposed to be IBR approved for Table 4 to subpart SSSSS. This document specifies methods, apparatus and calculations which are used to determine quantitatively, the gaseous constituents of the exhausts including oxygen and carbon dioxide resulting from station combustions sources.
- ASTM D6348–12e1, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, Approved February 1, 2012, proposed to be IBR approved for Table 4 to subpart SSSSS.
- ASTM D6784–16, ''Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method),'' (Approved March 1, 2016), proposed to be IBR approved for Table 4 to subpart SSSSS.
- EPA–454/R–98–015, Office of Air Quality Planning and Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, September 1997, proposed to be IBR approved for 40 CFR 63.9804(f). This document provides guidance on the use of triboelectric monitors as fabric filter bag leak detectors. The document includes fabric filter and monitoring system descriptions; guidance on monitor selection, installation, setup, adjustment, and operation; and quality assurance procedures.

V. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted

A. What are the affected facilities?

Currently, three major sources subject to the Refractory Products Manufacturing NESHAP are operating in the United States. The NESHAP applies to each new, reconstructed, and existing affected source located at a refractory products manufacturing facility that is a major source of HAP emissions, is located at a major source of HAP emissions, or is part of a major source of HAP emissions. A refractory products manufacturing facility is a plant site that manufactures refractory products, such as refractory bricks, refractory shapes, monolithics, kiln furniture, crucibles, and other materials used for lining furnaces and other high temperature process units. Refractory products manufacturing facilities typically process raw material by crushing, grinding, and screening; mixing the processed raw materials with binders and other additives; forming the refractory mix into shapes; and drying and firing the shapes. The NESHAP lists the affected sources for four subcategories across the industry as the shape dryers, curing ovens, and kilns that are used to manufacture refractory products that use organic HAP; shape preheaters, pitch working tanks, defumers, and coking ovens that are used to produce pitch-impregnated refractory products; kilns that are used to manufacture chromium refractory products; and kilns that are used to manufacture clay refractory products. The three major sources currently operating in the U.S. can be grouped into two of the subcategories and use curing ovens and kilns that are used to manufacture nonclay refractory products that use organic HAP and kilns that are used to manufacture clay refractory products.

B. What are the air quality impacts?

At the current level of control, the estimated emissions of HAP from the Refractory Products Manufacturing source category are approximately 40 tpy. The final amendments require that all three major sources in the Refractory Products Manufacturing source category comply with the relevant emission standards at all times, including periods of SSM. The final amendments also limit the number of hours a continuous kiln THC control device can be bypassed during scheduled maintenance and require minimizing emissions of THC during bypass periods. We were unable to quantify the emissions that occur during periods of SSM or the specific emissions reductions that would occur as a result of this action. However, eliminating the SSM exemption has the potential to reduce emissions by requiring facilities to meet the applicable standard during SSM periods. Requiring the use of natural gas as kiln fuel at all times also ensures that PM (as a surrogate for non-Hg metal HAP) and Hg will not be emitted from combustion of coal, fuel oil, or waste-derived fuels.

Indirect or secondary air emissions impacts are impacts that would result from the increased electricity usage associated with the operation of control devices (*e.g.,* increased secondary emissions of criteria pollutants from power plants). Energy impacts consist of the electricity and steam needed to operate control devices and other equipment. The final amendments would have no effect on the energy needs of the affected facilities in this source category and would, therefore, have no indirect or secondary air emissions impacts.

C. What are the cost impacts?

We estimate that each facility in this source category will experience costs as a result of these final amendments. Estimates for reporting and recordkeeping costs for each facility are associated with the electronic reporting requirements, elimination of the SSM exemption, and revision of the requirements that apply during times of scheduled maintenance of continuous kiln control devices. The costs associated with the electronic reporting requirements are attributed to submittal of NOCS reports, performance test results, and performance evaluation results using CEDRI and include time for becoming familiar with CEDRI. The costs associated with the revised SSM requirements were estimated for re-evaluating previously developed SSM record systems. The costs associated with recordkeeping to document the frequency and duration of scheduled maintenance of control devices for continuous kilns were also estimated. The recordkeeping and reporting costs are presented in section VI.C of this preamble.

We estimate the costs associated with this action are primarily due to the new compliance testing requirements for the clay refractory kilns in this action. Two of the major source refractory manufacturing facilities manufacture clay refractory and are required to conduct periodic compliance testing for PM as a surrogate for non-Hg metal HAP and Hg once every 5 years. One clay refractory manufacturing facility has two continuous kilns and the other has

two continuous kilns and three batch kilns. The costs associated with conducting the combined PM and Hg test for each continuous kiln stack are estimated to be about $23,600. The costs associated with conducting the combined PM and Hg test for each batch kiln stack are estimated to be about $31,800. We also assumed that tests for additional stacks at the same facility would be conducted in the same trip, so the additional cost is less due to reduced travel costs. The total costs for the two facilities to test the seven kilns in a single year would be $115,300. In addition to the testing costs, each facility performing the testing will have an additional $6,900 in reporting costs per facility in the year in which the test occurs.

For kilns that meet the limits without any controls, owners or operators are required to conduct VE monitoring to demonstrate compliance. One of the continuous kilns is controlled with a wet scrubber, but the other six kilns are expected to need to conduct VE monitoring. We estimate that the monitoring will cost $3,740 per year per stack, for a total of $22,400 per year.

For further information on the potential testing and monitoring costs, see the memorandum titled *Development of Proposed Standards and Impacts for the Refractory Products Manufacturing NESHAP,* located in the docket for this action (Docket Item No. EPA–HQ–OAR–2020–0148–0014).

D. What are the economic impacts?

The economic impact analysis is designed to inform decision makers about the potential economic consequences of the compliance costs outlined in section V.C of this preamble. To assess the maximum potential impact, the largest cost expected to be experienced in any one year is compared to the total sales for the ultimate owner of the affected facilities to estimate the total burden for each owner. For these final amendments, the total cost of testing, monitoring, and recordkeeping and reporting is estimated to be $158,140. The total annual costs associated with the requirements range from 0.00008 to 0.18 percent of annual sales revenue per ultimate owner. These costs are not expected to result in a significant market impact, regardless of whether they are passed on to customers or absorbed by the firms.

The EPA also prepared a small business screening assessment to determine whether any of the identified affected facilities are small entities, as defined by the U.S. Small Business Administration. One of the facilities affected by these amendments is a small entity. However, the annual cost associated with the requirements is 0.18 percent of annual sales revenue for the owner of that facility. Therefore, there are no significant economic impacts on a substantial number of small entities from these amendments.

E. What are the benefits?

As stated above in section V.B. of this preamble, we were unable to quantify the specific emissions reductions associated with eliminating the SSM exemption, although this change has the potential to reduce emissions of volatile organic HAP.

Because these final amendments are not considered economically significant, as defined by Executive Order 12866, we did not monetize the benefits of reducing these emissions. This does not mean that there are no benefits associated with the potential reduction in volatile organic HAP from this rule.

F. What analysis of environmental justice did we conduct?

Executive Order 12898 directs the EPA to identify the populations of concern who are most likely to experience unequal burdens from environmental harms; specifically, minority populations, low-income populations, and indigenous peoples (59 FR 7629, February 16, 1994). Additionally, Executive Order 13985 was signed to advance racial equity and support underserved communities through Federal government actions (86 FR 7009, January 20, 2021). The EPA defines environmental justice (EJ) as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The EPA further defines the term fair treatment to mean that ''no group of people should bear a disproportionate burden of environmental harms and risks, including those resulting from the negative environmental consequences of industrial, governmental, and commercial operations or programs and policies'' (*https://www.epa.gov/environmentaljustice*). In recognizing that minority and low-income populations often bear an unequal burden of environmental harms and risks, the EPA continues to consider ways of protecting them from adverse public health and environmental effects of air pollution.

Based on an analysis of exposed populations, the EPA determined that the Refractory Products Manufacturing source category does not pose a disproportionately high adverse health impact on minority populations and/or low-income populations, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994) and referenced in Executive Order 13985 (86 FR 7009, January 20, 2021). The EPA remains committed to engaging with communities and stakeholders throughout the development of air pollution regulations.

To examine the potential for any environmental justice issues that might be associated with this source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 km and within 50 km of the facilities. In the analysis, we also evaluated the distribution of HAP-related cancer and noncancer risks from the Refractory Products Manufacturing source category across different demographic groups within the populations living near facilities.[3]

The results of the demographic analysis for the Refractory Products Manufacturing source category indicates that no one is exposed to a cancer risk at or above 1-in-1 million or to a chronic noncancer TOSHI greater than 1. In addition, no percentages of the populations exposed to emissions from the source category are higher than their respective nationwide average percentages. Thus, the populations living near refractory products manufacturing facilities are similar to the national average in demographic characteristics, and we do not see a disproportionately high exposure to the population groups indicated in the Executive Orders. The methodology and the results of the demographic analysis are presented in more detail in the technical report titled *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Refractory Products Manufacturing Source Category Operations,* September 2020, available in the docket for this action (Docket Item No. EPA–HQ–OAR–2020–0148–0007).

G. What analysis of children's environmental health did we conduct?

This action is not subject to Executive Order 13045 because it is not

[3] Demographic groups included in the analysis are: White, African American, Native American, other races and multiracial, Hispanic or Latino, children 17 years of age and under, adults 18 to 64 years of age, adults 65 years of age and over, adults without a high school diploma, people living below the poverty level, people living two times the poverty level, and linguistically isolated people.

economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in section IV.A of this preamble and are further documented in the *Residual Risk Assessment for the Refractory Products Manufacturing Source Category in Support of the 2020 Risk and Technology Review Proposed Rule,* available in the Refractory Products Manufacturing docket (Docket Item No. EPA–HQ–OAR–2020–0148–0013).

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 OMB for review.

B. Paperwork Reduction Act (PRA)

The information collection activities in this action have been submitted for approval to OMB under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 2040.08. You can find a copy of the ICR in the Refractory Products Manufacturing Docket (Docket ID No. EPA–HQ–OAR–2020–0148), and it is briefly summarized here.

As part of the RTR for the Refractory Products Manufacturing NESHAP, the EPA is not revising the existing emission limit requirements but is adding new emission limit requirements for existing clay refractory sources and is adding new work practices for existing nonclay refractory sources. The EPA is also revising the SSM provisions of the rule and is adding the use of electronic data reporting for future performance test result and performance evaluation result submittals, and NOCS reports. This information is being collected to assure compliance with 40 CFR part 63, subpart SSSSS.

Respondents/affected entities: Facilities manufacturing refractory products.

Respondent's obligation to respond: Mandatory (40 CFR part 63, subpart SSSSS).

Estimated number of respondents: In the 3 years after the amendments are final, approximately three respondents per year will be subject to the NESHAP and no additional respondents are expected to become subject to the NESHAP during that period.

Frequency of response: The total number of responses is 15 per year.

Total estimated burden: The average annual burden to the three refractory products manufacturing facilities over the 3 years after the amendments are final is estimated to be 230 hours (per year). The average annual burden to the Agency over the 3 years after the amendments are final is estimated to be 202 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: The average annual cost to the refractory products manufacturing facilities is $27,100 in labor costs in the first 3 years after the amendments are final. The average annual capital and operation and maintenance (O&M) cost is $69,900. The total average annual Agency cost over the first 3 years after the amendments are final is estimated to be $9,990.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

C. 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. The annualized costs associated with the requirements in this action for the affected small entities is described in section V.C. above.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain an unfunded mandate of $100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. While this action creates an enforceable duty on the private sector, the cost does not exceed $100 million or more.

E. 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.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. No tribal facilities are known to be engaged in any of the industries that would be affected by this action. In addition, the EPA conducted a proximity analysis for this source category and found that no refractory products manufacturing facilities are located within 50 miles of tribal lands. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. This action's health and risk assessments are contained in section IV.A of this preamble and are further documented in the Refractory Products Manufacturing Docket.

H. 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.

I. National Technology Transfer and Advancement Act and 1 CFR Part 51

This action involves technical standards. The EPA amended the Refractory Products Manufacturing NESHAP in this action with two methods that can be used as alternatives to the EPA methods in the current NESHAP: ANSI/ASME PTC 19.10–1981, ''Flue and Exhaust Gas Analyses'' and ASTM D6348–12e1, ''Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform (FTIR) Spectroscopy''. The EPA also amended the Refractory Products Manufacturing NESHAP in this action with two new methods: EPA Method 29 (portion for Hg only) and alternative method ASTM D6784–16, ''Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)''. The EPA also added new guidance to the NESHAP: EPA–454/R–98–015, Office of Air Quality Planning and Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, September 1997. The methods and guidance will be incorporated by reference as described below.

The EPA is incorporating by reference the VCS ANSI/ASME PTC 19.10–1981,

''Flue and Exhaust Gas Analyses.'' This method determines quantitatively the gaseous constituents of exhausts resulting from stationary combustion sources. The manual procedures (but not instrumental procedures) of VCS ANSI/ASME PTC 19.10–1981—Part 10 may be used as an alternative to EPA Method 3B for measuring the oxygen or carbon dioxide content of the exhaust gas. The gases covered in ANSI/ASME PTC 19.10–1981 are oxygen, carbon dioxide, carbon monoxide, nitrogen, sulfur dioxide, sulfur trioxide, nitric oxide, nitrogen dioxide, hydrogen sulfide, and hydrocarbons, however the use in this rule is only applicable to oxygen and carbon dioxide and is an acceptable alternative to the manual portion only and not the instrumental portion.

The EPA is incorporating by reference the VCS ASTM D6348–12e1, ''Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform (FTIR) Spectroscopy'' as an acceptable alternative to EPA Method 320. ASTM D6348–03(2010) was determined to be equivalent to EPA Method 320 with caveats. ASTM D6348–12e1 is a revised version of ASTM D6348–03(2010) and includes a new section on accepting the results from the direct measurement of a certified spike gas cylinder, but lacks the caveats placed on the D6348–03(2010) version. The VCS ASTM D6348–12e1 ''Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform (FTIR) Spectroscopy'' is an extractive FTIR field test method used to quantify gas phase concentrations of multiple analytes from stationary source effluent and is an acceptable alternative to EPA Method 320 at this time with caveats requiring inclusion of selected annexes to the standard as mandatory. When using ASTM D6348–12e1, the following conditions must be met:

(1) The test plan preparation and implementation in the Annexes to ASTM D6348–03, sections A1 through A8 are mandatory; and

(2) In ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent (%) R must be determined for each target analyte (Equation A5.5).

In order for the test data to be acceptable for a compound, %R must be $70\% \geq R \leq 130\%$. If the %R value does not meet this criterion for a target compound, the test data is not acceptable for that compound and the test must be repeated for that analyte (*i.e.,* the sampling and/or analytical procedure should be adjusted before a retest). The %R value for each compound must be reported in the test report, and all field measurements must be corrected with the calculated %R value for that compound by using the following equation: Reported Results = ((Measured Concentration in Stack))/(%R) × 100.

The EPA is also incorporating by reference the VCS ASTM D6784–16, ''Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)'' as an acceptable alternative to EPA Method 29 (portion for Hg only) as a method for measuring elemental, oxidized, particle-bound, and total Hg concentrations ranging from approximately 0.5–100 micrograms per normal cubic meter (μg/Nm^3). This test method describes equipment and procedures for obtaining samples from effluent ducts and stacks, equipment and procedures for laboratory analysis, and procedures for calculating results. VCS ASTM D6784–16 allows for additional flexibility in the sampling and analytical procedures for the earlier version of the same standard VCS ASTM D6784–02 (Reapproved 2008).

The EPA is also incorporating by reference EPA–454/R–98–015, Office of Air Quality Planning and Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, September 1997, IBR for 40 CFR 63.9804(f). This document provides guidance on the use of triboelectric monitors as fabric filter bag leak detectors and includes fabric filter and monitoring system descriptions; guidance on monitor selection, installation, setup, adjustment, and operation; and quality assurance procedures.

Guidance document EPA–454/R–98–015 and ASTM D6784–16 are available electronically through *https://www.regulations.gov/* and/or in hard copy at the appropriate EPA office (see the **ADDRESSES** section of this preamble for more information). The ANSI/ASME document (ANSI/ASME PTC 19.10–1981) is available from the American Society of Mechanical Engineers (ASME) at *http://www.asme.org;* by mail at Three Park Avenue, New York, NY 10016–5990; or by telephone at (800) 843–2763. The ASTM methods are available from ASTM International at *https://www.astm.org;* by mail at 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428–2959; or by telephone at (610) 832–9585.

J. 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 documentation for this decision is contained in the technical report titled *Risk and Technology Review—Analysis of Demographic Factors for Populations Living Near Refractory Products Manufacturing Source Category Operations,* September 2020, available in the Refractory Products Manufacturing Docket for this action (Docket Item No. EPA–HQ–OAR–2020–0148–0007).

The EPA provided opportunities to engage with the EPA on this action. The Agency offered a public hearing and reached out to communities in other ways, including meetings to exchange information with stakeholders about this action. We did not receive a request for a public hearing, and we did not receive feedback regarding EJ during the meetings.

K. 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, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements.

Michael S. Regan,

Administrator.

For the reasons set out in the preamble, 40 CFR part 63 is amended 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 A—General Provisions

■ 2. Section 63.14 is amended by:

■ a. Revising paragraphs (e)(1) and (h)(86);

■ b. Redesignating paragraphs (h)(104) through (118) as paragraphs (h)(105) through (119);

■ c. Adding new paragraph (h)(104); and

■ d. Revising paragraph (n)(4).

The revisions and additions read as follows:

§ 63.14 Incorporations by reference.

* * * * *

(e) * * *

(1) ANSI/ASME PTC 19.10–1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], issued August 31, 1981, IBR approved for §§ 63.309(k), 63.457(k), 63.772(e) and (h), 63.865(b), 63.997(e), 63.1282(d) and (g), and 63.1625(b), table 5 to subpart EEEE, §§ 63.3166(a), 63.3360(e), 63.3545(a), 63.3555(a), 63.4166(a), 63.4362(a), 63.4766(a), 63.4965(a), and 63.5160(d), table 4 to subpart UUUU, table 3 to subpart YYYY, §§ 63.7822(b), 63.7824(e), 63.7825(b), 63.8000(d), 63.9307(c), 63.9323(a), 63.9621(b) and (c), 63.11148(e), 63.11155(e), 63.11162(f), 63.11163(g), 63.11410(j), 63.11551(a), 63.11646(a), and 63.11945, and table 4 to subpart AAAAA, table 5 to subpart DDDDD, table 4 to subpart JJJJJ, table 4 to subpart KKKKK, table 4 to subpart SSSSS, tables 4 and 5 of subpart UUUUU, table 1 to subpart ZZZZZ, and table 4 to subpart JJJJJJ.

* * * * *

(h) * * *

(86) ASTM D6348–12e1, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, Approved February 1, 2012, IBR approved for §§ 63.997(e), 63.1571(a), and 63.2354(b), table 5 to subpart EEEE, table 4 to subpart UUUU, §§ 63.7142(a) and (b) and 63.8000(d), and table 4 to subpart SSSSS.

* * * * *

(104) ASTM D6784–16, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), Approved March 1, 2016, IBR approved for table 4 to subpart SSSSS.

* * * * *

(n) * * *

(4) EPA–454/R–98–015, Office of Air Quality Planning and Standards (OAQPS), Fabric Filter Bag Leak Detection Guidance, September 1997, *https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=2000D5T6.PDF,* IBR approved for §§ 63.548(e), 63.864(e), 63.7525(j), 63.8450(e), 63.8600(e), 63.9632(a), 63.9804(f), and 63.11224(f).

* * * * *

Subpart SSSSS—National Emission Standards for Hazardous Air Pollutants for Refractory Products Manufacturing

■ 3. Section 63.9786 is amended by revising paragraphs (a), (b), and (d)(2) to read as follows:

§ 63.9786 When do I have to comply with this subpart?

(a) If you have a new or reconstructed affected source, you must comply with this subpart according to paragraphs (a)(1) and (2) of this section.

(1) If the initial startup of your affected source is before April 16, 2003, then you must comply with the emission limitations for new and reconstructed sources in this subpart no later than April 16, 2003, except as otherwise specified in §§ 63.9792, 63.9812(c) and (e), and 63.9814(b)(6) and Tables 1 through 11 to this subpart.

(2) If the initial startup of your affected source is after April 16, 2003, then you must comply with the emission limitations for new and reconstructed sources in this subpart upon initial startup of your affected source, except as otherwise specified in §§ 63.9792, 63.9812(c) and (e), and 63.9814(b)(6) and Tables 1 through 11 to this subpart.

(b) If you have an existing affected source, you must comply with the emission limitations for existing sources no later than April 17, 2006, except as otherwise specified in §§ 63.9792, 63.9812(c) and (e), and 63.9814(b)(6) and Tables 1 through 11 to this subpart.

* * * * *

(d) * * *

(2) All other parts of the existing facility must be in compliance with this subpart by 3 years after the date the area source becomes a major source, except as otherwise specified in §§ 63.9792, 63.9812(c) and (e), and 63.9814(b)(6) and Tables 1 through 11 to this subpart.

* * * * *

■ 4. Section 63.9792 is amended by revising paragraph (a) introductory text, paragraphs (b) and (c), paragraph (e) introductory text, and paragraphs (e)(2) and (3) to read as follows:

§ 63.9792 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations (including operating limits and work practice standards) in this subpart at all times, except during periods specified in paragraphs (a)(1) and (2) of this section before May 19, 2022. You must be in compliance with the emission limitations (including operating limits and work practice standards) in this subpart at all times, on or after May 19, 2022.

* * * * *

(b) Except as specified in paragraph (e) of this section, before May 19, 2022, you must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in § 63.6(e)(1)(i). During the period between the compliance date specified for your affected source in § 63.9786 and the date upon which continuous monitoring systems have been installed and validated and any applicable operating limits have been established, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment. On and after May 19, 2022, at all times, you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the affected source.

(c) Before May 19, 2022, you must develop a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in § 63.6(e)(3). On or after May 19, 2022, you are not required to develop a written SSMP according to the provisions in § 63.6(e)(3).

* * * * *

(e) If you own or operate an affected continuous kiln used to manufacture refractory products that use organic HAP and you must perform scheduled maintenance on the THC control device for that kiln, you may bypass the kiln THC control device and continue operating the kiln subject to the alternative standard established in this paragraph upon approval by the Administrator, provided you satisfy the conditions listed in paragraphs (e)(1) through (3) of this section.

* * * * *

(2) Before May 19, 2022, you must minimize HAP emissions during the period when the kiln is operating, and the control device is out of service. On

and after May 19, 2022, you must minimize HAP emissions during the period when the kiln is operating and the control device is out of service by complying with the applicable standard in Table 3 to this subpart.

(3) You must minimize the time period during which the kiln is operating and the control device is out of service. On and after May 19, 2022, the total time during which the kiln is operating and the control device is out of service for each year on a 12-month rolling basis must not exceed 750 hours.

* * * * *

■ 5. Section 63.9794 is amended by revising paragraphs (a)(7), (8), (12), and (13) and paragraph (b)(2) to read as follows:

§ 63.9794 What do I need to know about operation, maintenance, and monitoring plans?

(a) * * *

(7) Before May 19, 2022, procedures for the proper operation and maintenance of monitoring equipment consistent with the requirements in §§ 63.8(c)(1), (3), (4)(ii), (7), and (8), and 63.9804. On or after May 19, 2022, procedures for the proper operation and maintenance of monitoring equipment consistent with the requirements in §§ 63.8(c)(3), (4)(ii), (7), and (8), and 63.9804.

(8) Before May 19, 2022, ongoing data quality assurance procedures in accordance with the general requirements of § 63.8(d). On or after May 19, 2022, ongoing data quality assurance procedures consistent with the requirements in § 63.8(d)(1) and (2). You must keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan in § 63.8(d)(2) is revised, you must keep previous (*i.e.,* superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under § 63.8(d)(2).

* * * * *

(12) Before Novermber 19, 2021, if you operate a kiln that is subject to the limits on the type of fuel used, as specified in items 3 and 4 of Table 3 to subpart SSSSS, procedures for using alternative fuels. On and after Novermber 19, 2021, you may not use a fuel other than natural gas or equivalent to fire the affected kiln.

(13) If you operate an affected continuous kiln used to manufacture refractory products that use organic HAP and you plan to take the kiln THC control device out of service for scheduled maintenance, as specified in § 63.9792(e), the procedures specified in paragraphs (a)(13)(i) and (ii) of this section.

(i) Procedures for minimizing HAP emissions from the kiln during periods of scheduled maintenance of the kiln control device when the kiln is operating and the control device is out of service. On or after May 19, 2022, document the average organic HAP processing rate for that kiln (*i.e.,* the average organic HAP processing rate based on (a) the actual production on a 6-month rolling basis (not to include periods of kiln shut down) or (b) the HAP processing rate (lb/hr) that coincides with the lowest hour of the most recent 3-hour performance test, whichever is lower), the mass fraction of organic HAP in the resins, binders, and additives for each product manufactured in the kiln and procedures for ensuring that the actual organic HAP processing rate on an hourly basis does not exceed the average organic HAP processing rate.

(ii) Procedures for minimizing any period of scheduled maintenance on the kiln control device when the kiln is operating and the control device is out of service. On or after May 19, 2022, procedures for ensuring that the total time during which the kiln is operating and the control device is out of service does not exceed 750 hours for each year on a 12-month rolling basis.

(b) * * *

(2) After completing the performance tests to demonstrate that compliance with the emission limits can be achieved at the revised operating limit parameter value, you must submit the summary of the performance test results and the revised operating limits as part of the Notification of Compliance Status required under § 63.9(h) and the complete test report according to § 63.9814(h).

* * * * *

■ 6. Section 63.9800 is amended by revising paragraphs (c) and (d) and paragraph (g) introductory text and adding paragraph (g)(4) to read as follows:

§ 63.9800 How do I conduct performance tests and establish operating limits?

* * * * *

(c) Before May 19, 2022, each performance test must be conducted according to the requirements in § 63.7 and under the specific conditions in Table 4 to this subpart. On or after May 19, 2022, each performance test must be conducted under the specific conditions in Table 4 to this subpart.

(d) Before May 19, 2022, you may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 63.7(e)(1). On or after May 19, 2022, you may not conduct performance tests during periods of malfunction. You also may not conduct performance tests during periods of startup or shutdown. You must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. You must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

* * * * *

(g) You must use the data gathered during the performance test and the equations in paragraphs (g)(1) through (4) of this section to determine compliance with the emission limitations.

* * * * *

(4) To determine compliance with the Hg emission concentration limit listed in Table 1 to this subpart, you must calculate your emission concentration corrected to 18 percent oxygen for each test run using Equation 4 of this section:

$$C_{Hg\text{-}C} = \frac{2.9 \times C_{Hg}}{\left(20.9 - C_{O_2}\right)} \qquad \text{(Eq. 4)}$$

Where:

$C_{Hg\text{-}C}$ = Hg concentration, corrected to 18 percent oxygen, micrograms per dry standard cubic meters (μg/dscm)

C_{Hg} = Hg concentration (uncorrected), μg/dscm

C_{O2} = oxygen concentration, percent.

* * * * *

■ 7. Section 63.9804 is amended by revising paragraphs (a)(13), (e)(1), and (f)(1) to read as follows:

§ 63.9804 What are my monitoring system installation, operation, and maintenance requirements?

(a) * * *

(13) At all times, you must maintain your CPMS in accordance with § 63.9792(b), including, but not limited to, keeping the necessary parts readily available for routine repairs of the CPMS.

* * * * *

(e) * * *

(1) Use a pH CPMS with a minimum accuracy of ±0.2 pH units.

* * * * *

(f) * * *

(1) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the ''Fabric Filter Bag Leak Detection Guidance'' (EPA–454/R–98–015, September 1997) (incorporated by reference, see § 63.14). Other types of bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

* * * * *

■ 8. Section 63.9806 is amended by revising paragraph (d) to read as follows:

§ 63.9806 How do I demonstrate initial compliance with the emission limits, operating limits, and work practice standards?

* * * * *

(d) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.9812(e). After Novermber 19, 2021 for affected sources that commence construction or reconstruction after January 14, 2021, and on and after May 19, 2022 for all other affected sources, you must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in § 63.9812(e) and 63.9814(j).

■ 9. Section 63.9808 is amended by revising paragraph (b) to read as follows:

§ 63.9808 How do I monitor and collect data to demonstrate continuous compliance?

* * * * *

(b) At all times, you must maintain your monitoring systems in accordance with § 63.9792(b), including, but not limited to, keeping the necessary parts readily available for routine repairs of the monitoring equipment.

* * * * *

■ 10. Section 63.9810 is amended by revising paragraph (e) and adding paragraph (f) to read as follows:

§ 63.9810 How do I demonstrate continuous compliance with the emission limits, operating limits, and work practice standards?

* * * * *

(e) Before May 19, 2022, you must report each instance in which you did not meet each emission limit and each operating limit in this subpart that applies to you. This includes periods of SSM. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in § 63.9814. On or after May 19, 2022, you must report each instance in which you did not meet each emission limit and each operating limit in this subpart that applies to you. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in § 63.9814.

(1) [Reserved]

(2) Before May 19, 2022, consistent with §§ 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with § 63.6(e)(1) and your OM&M plan. The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in § 63.6(e). On or after May 19, 2022, consistent with §§ 63.9792(b) and 63.9800(d), deviations are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with § 63.9792(b) and your OM&M plan. The Administrator will determine whether deviations are violations, according to the provisions in § 63.9792(b).

(f) You must demonstrate continuous compliance with the operating limits in Table 2 to this subpart for visible emissions (VE) from clay refractory products kilns that are uncontrolled or equipped with DLA, dry lime injection fabric filter (DIFF), dry lime scrubber/fabric filter (DLS/FF) or other dry control device as described in paragraph (f)(1) or (2) of this section.

(1) *VE testing.* Monitoring VE at each kiln stack according to the requirements in paragraphs (f)(1)(i) through (v) of this section.

(i) Perform daily VE observations of each kiln stack according to the procedures of EPA Method 22 of 40 CFR part 60, appendix A–7. You must conduct the EPA Method 22 test while the affected source is operating under normal conditions. The duration of each EPA Method 22 test must be at least 15 minutes.

(ii) If VE are observed during any daily test conducted using EPA Method 22 of 40 CFR part 60, appendix A–7, you must promptly conduct an opacity test, according to the procedures of EPA Method 9 of 40 CFR part 60, appendix A–4. If opacity greater than 10 percent is observed, you must initiate and complete corrective actions according to your OM&M plan.

(iii) You may decrease the frequency of EPA Method 22 testing from daily to weekly for a kiln stack if one of the conditions in paragraph (f)(1)(iii)(A) or (B) of this section is met.

(A) No VE are observed in 30 consecutive daily EPA Method 22 tests for any kiln stack; or

(B) No opacity greater than 10 percent is observed during any of the EPA Method 9 tests for any kiln stack.

(iv) If VE are observed during any weekly test and opacity greater than 10 percent is observed in the subsequent EPA Method 9 test, you must promptly initiate and complete corrective actions according to your OM&M plan, resume testing of that kiln stack following EPA Method 22 of 40 CFR part 60, appendix A–7, on a daily basis, as described in paragraph (f)(1)(i) of this section, and maintain that schedule until one of the conditions in paragraph (f)(1)(iii)(A) or (B) of this section is met, at which time you may again decrease the frequency of EPA Method 22 testing to a weekly basis.

(v) If greater than 10 percent opacity is observed during any test conducted using EPA Method 9 of 40 CFR part 60, appendix A–4, you must report these deviations by following the requirements in § 63.9814.

(2) *Alternative to VE testing.* In lieu of meeting the requirements under paragraph (f)(1) of this section, you may conduct a PM test at least once every year following the initial performance test, according to the procedures of EPA Method 5 of 40 CFR part 60, appendix A–3, and the provisions of § 63.9800(e) and (f).

■ 11. Section 63.9812 is amended by revising paragraphs (b) and (c), paragraph (e) introductory text, paragraph (e)(1), paragraph (f) introductory text, and paragraph (g) to read as follows:

§ 63.9812 What notifications must I submit and when?

* * * * *

(b) As specified in § 63.9(b)(2) and (3), if you start up your affected source before April 16, 2003, you must submit an Initial Notification not later than 120 calendar days after April 16, 2003, or no later than 120 days after the source becomes subject to this subpart, whichever is later.

(c) As specified in § 63.9(b)(3), if you start up your new or reconstructed affected source on or after April 16, 2003, you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart. Initial Notifications required to be submitted after November 19, 2021 for affected sources that commence construction or reconstruction after January 14, 2021, and on and after May 19, 2022 for all other affected sources submitting initial notifications required in § 63.9(b) must be submitted following the procedure specified in § 63.9814(h) through (l).

* * * * *

(e) If you are required to conduct a performance test, you must submit a Notification of Compliance Status as specified in § 63.9(h) and paragraphs (e)(1) and (2) of this section. After November 19, 2021 for affected sources that commence construction or reconstruction after January 14, 2021, and on and after May 19, 2022 for all other affected sources, submit all subsequent Notifications of Compliance Status following the procedure specified in § 63.9814(h) through (l).

(1) For each compliance demonstration that includes a performance test conducted according to the requirements in Table 4 to this subpart, you must submit the Notification of Compliance Status, including the summary of the performance test results, before the close of business on the 60th calendar day following the completion of the performance test.

* * * * *

(f) Before November 19, 2021, if you operate a clay refractory products kiln or a chromium refractory products kiln that is subject to the work practice standard specified in item 3 or 4 of Table 3 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected kiln, you must submit a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in § 63.9824. The notification must include the information specified in paragraphs (f)(1) through (5) of this section. On and after November 19, 2021, you may not use a fuel other than natural gas or equivalent to fire the affected kiln.

* * * * *

(g) If you own or operate an affected continuous kiln used to manufacture refractory products that use organic HAP and must perform scheduled maintenance on the THC control device for that kiln, you must request approval from the Administrator before bypassing the control device, as specified in § 63.9792(e). You must submit a separate request for approval each time you plan to bypass the kiln control device.

■ 12. Section 63.9814 is amended by:

■ a. Revising paragraph (c) introductory text and paragraph (c)(4);

■ b. Adding paragraph (c)(7);

■ c. Revising paragraphs (d) and (e) and paragraph (g) introductory text; and

■ d. Adding paragraphs (h) through (l).

The revisions and additions read as follows:

§ 63.9814 What reports must I submit and when?

* * * * *

(c) The compliance report must contain the information in paragraphs (c)(1) through (7) of this section.

* * * * *

(4) Before May 19, 2022, if you had a startup, shutdown, or malfunction during the reporting period, and you took actions consistent with your SSMP and OM&M plan, the compliance report must include the information specified in § 63.10(d)(5)(i). On or after May 19, 2022, if you had a deviation from any emission limitations (emission limit, operating limit, or work practice standard) during the reporting period that apply to you, and you took actions consistent with your OM&M plan, the compliance report must include the information specified in (d) and (e) of this section.

* * * * *

(7) For each period when an affected continuous kiln used to manufacture refractory products that use organic HAP was operating while the THC control device was out of service, the compliance report must include a description of the control device maintenance performed, including the information specified in paragraphs (c)(7)(i) through (vi) of this section.

(i) The date and time when the control device was shut down and restarted.

(ii) Identification of the kiln that was operating and the number of hours that the kiln operated while the control device was out of service.

(iii) A statement of whether or not the control device maintenance was included in your approved request to bypass the control device while scheduled maintenance is performed, developed as specified in § 63.9792(e).

(iv) Before May 19, 2022, a statement of whether emissions were minimized while the control device was out of service in accordance with your OM&M plan. After May 19, 2022, a statement of whether emissions were minimized while the control device was out of service in accordance with your OM&M plan and the information specified in paragraphs (c)(7)(iv)(A) through (C) of this section.

(A) The average organic HAP processing rate based on actual production on a 6-month rolling basis (not to include periods of kiln shut down) or the lowest hourly organic HAP processing rate from the most recent performance test on that kiln, whichever is lower.

(B) The actual hourly organic HAP processing rate for the kiln while the control device was out of service.

(C) The amount of product manufactured and the mass of organic HAP in the product manufactured in the kiln while the control device was out of service.

(v) After May 19, 2022, an estimate of the THC emissions from the continuous kiln stack while the control device was out of service.

(vi) After May 19, 2022, the total number of hours that the kiln has operated while the control device was out of service during the last year on a 12-month rolling basis.

(d) Before May 19, 2022, for each deviation from an emission limitation (emission limit, operating limit, or work practice standard) that occurs at an affected source where you are not using a CPMS to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (4) and (d)(1) and (2) of this section. This includes periods of SSM. On or after May 19, 2022, for each deviation from an emission limitation (emission limit, operating limit, or work practice standard) that occurs at an affected source where you are not using a CPMS to comply with the emission limitations in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (4) and (d)(1) through (3) of this section.

(1) The compliance report must include the total operating time of each affected source during the reporting period.

(2) The compliance report must include information on the number,

duration in hours, and cause of deviations (including unknown cause, if applicable) and the corrective action taken.

(3) The compliance report must include the date and time of each deviation, a list of the affected sources or equipment, and an estimate of each regulated pollutant emitted over the emission limit and a description of the method used to estimate the emissions.

(e) Before May 19, 2022, for each deviation from an emission limitation (emission limit, operating limit, or work practice standard) occurring at an affected source where you are using a CPMS to comply with the emission limitation in this subpart, the compliance report must include the information in paragraphs (c)(1) through (4) and (e)(1) through (13) of this section. This includes periods of SSM. On or after May 19, 2022, for each deviation from an emission limitation (emission limit, operating limit, or work practice standard) occurring at an affected source where you are using a CPMS to comply with the emission limitation in this subpart, the compliance report must include the information in paragraphs (c)(1) through (4) and (e)(1) through (13) of this section.

(1) The total operating time of each affected source during the reporting period.

(2) Before May 19, 2022, the date and time that each startup, shutdown, or malfunction started and stopped. On or after May 19, 2022, the date and time that each startup, shutdown, or malfunction started and stopped is not required.

(3) The date, time, and duration in hours that each CPMS was inoperative.

(4) The date, time and duration in hours that each CPMS was out of control, including the information in § 63.8(c)(8), as required by your OM&M plan.

(5) Before May 19, 2022, the date and time that each deviation from an emission limitation (emission limit, operating limit, or work practice standard) started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction. On or after May 19, 2022, for each deviation from an emission limitation (emission limit, operating limit, or work practice standard), the date and time that each deviation started and stopped, the duration in hours, a list of the affected sources or equipment, an estimate of each regulated pollutant emitted over the emission limit, and a description of the method used to estimate the emissions.

(6) A description of corrective action taken in response to a deviation.

(7) The total number of deviations during the reporting period, a summary of the total duration in hours of the deviations during the reporting period, and the total duration as a percentage of the total source operating time during that reporting period.

(8) Before May 19, 2022, a breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes. On or after May 19, 2022, a breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(9) A summary of the total duration in hours of CPMS downtime during the reporting period and the total duration of CPMS downtime as a percentage of the total source operating time during that reporting period.

(10) A brief description of the process units.

(11) A brief description of the CPMS.

(12) The date of the latest CPMS initial validation or accuracy audit.

(13) A description of any changes in CPMS, processes, or controls since the last reporting period.

* * * * *

(g) Before November 19, 2021, if you operate a clay refractory products kiln or a chromium refractory products kiln that is subject to the work practice standard specified in item 3 or 4 of Table 3 to this subpart, and you use a fuel other than natural gas or equivalent to fire the affected kiln, you must submit a report of alternative fuel use within 10 working days after terminating the use of the alternative fuel. The report must include the information in paragraphs (g)(1) through (6) of this section. On and after November 19, 2021, you may not use a fuel other than natural gas or equivalent to fire the affected kiln.

* * * * *

(h) Beginning on May 19, 2022, within 60 days after the date of completing each performance test required by this subpart, you must submit the results of the performance test following the procedures specified in paragraphs (h)(1) through (3) of this section.

(1) *Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test.* Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's CDX (*https://cdx.epa.gov/).* The data must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(2) *Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test.* The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(3) *Confidential business information (CBI).* Do not use CEDRI to submit information you claim as CBI. Anything submitted using CEDRI cannot later be claimed CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information submitted under paragraph (h)(1) or (2) of this section, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated using the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAPQS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraphs (h)(1) and (2) of this section. All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(i) Beginning on May 19, 2022, within 60 days after the date of completing each continuous emissions monitoring system (CEMS) performance evaluation (as defined in § 63.2), you must submit the results of the performance evaluation following the procedures specified in paragraphs (i)(1) through (3) of this section.

(1) *Performance evaluations of CEMS measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation.* Submit the results of the performance evaluation to the EPA via CEDRI, which can be accessed through the EPA's CDX. The data must be submitted in a file format generated using the EPA's ERT. Alternatively, you may submit an electronic file consistent with the XML schema listed on the EPA's ERT website.

(2) *Performance evaluations of CEMS measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation.* The results of the performance evaluation must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(3) *CBI.* Do not use CEDRI to submit information you claim as CBI. Anything submitted using CEDRI cannot later be claimed CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information submitted under paragraph (i)(1) or (2) of this section, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated using the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in paragraphs (h)(1) and (2) of this section. All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(j) Beginning May 19, 2022, you must submit all subsequent Notification of Compliance Status reports in PDF format to the EPA via CEDRI, which can be accessed through EPA's CDX (*https://cdx.epa.gov/*).The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Anything submitted using CEDRI cannot later be claimed CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim, submit a complete report, including information claimed to be CBI, to the EPA. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Refractory Lead MD C404–02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (j). All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(k) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with that reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (k)(1) through (7) of this section.

(1) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.

(2) The outage must have occurred within the period of time beginning five business days prior to the date that the submission is due.

(3) The outage may be planned or unplanned.

(4) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(5) You must provide to the Administrator a written description identifying:

(i) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to EPA system outage;

(iii) A description of measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(6) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(7) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(l) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of *force majeure* for failure to timely comply with that reporting requirement. To assert a claim of *force majeure,* you must meet the requirements outlined in paragraphs (l)(1) through (5) of this section.

(1) You may submit a claim if a *force majeure* event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a *force majeure* event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (*e.g.,* hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (*e.g.,* large scale power outage).

(2) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.

(3) You must provide to the Administrator:

(i) A written description of the *force majeure* event;

(ii) A rationale for attributing the delay in reporting beyond the regulatory deadline to the *force majeure* event;

(iii) A description of measures taken or to be taken to minimize the delay in reporting; and

(iv) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(4) The decision to accept the claim of *force majeure* and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(5) In any circumstance, the reporting must occur as soon as possible after the *force majeure* event occurs.

■ 13. Section 63.9816 is amended by revising paragraph (a)(2) and paragraphs (c)(5), (8), and (10) to read as follows:

§ 63.9816 What records must I keep?

(a) * * *

(2) Before May 19, 2022, the records in § 63.6(e)(3)(iii) through (v) related SSM.

* * * * *

(c) * * *

(5) For each deviation of an operating limit parameter value, record the information in paragraphs (c)(5)(i) through (iv) of this section.

(i) The date, time, and duration in hours of the deviation.

(ii) On or after May 19, 2022, a list of the affected sources or equipment.

(iii) On or after May 19, 2022, an estimate of the quantity in pounds of each regulated pollutant over any emission limit and a description of the method used to estimate emissions.

(iv) Actions taken to minimize emissions in accordance with § 63.9792(b), a brief explanation of the cause of the deviation, and the corrective action taken to return the affected unit to its normal or usual manner of operation.

* * * * *

(8) Records of maintenance activities and inspections performed on control devices, including all records associated with the scheduled maintenance of the THC control devices on continuous kilns used to manufacture refractory products that use organic HAP, as specified in § 63.9792(e).

* * * * *

(10) Current copies of the OM&M plan, including any revisions and records documenting conformance with those revisions.

■ 14. Section 63.9820 is revised to read as follows:

§ 63.9820 What parts of the General Provisions apply to me?

Table 11 to this subpart shows which parts of the General Provisions specified in §§ 63.1 through 63.16 apply to you.

■ 15. Section 63.9822 is amended by revising paragraph (c) introductory text and adding paragraph (c)(5) to read as follows:

§ 63.9822 Who implements and enforces this subpart?

* * * * *

(c) The authorities that cannot be delegated to state, local, or tribal agencies are as specified in paragraphs (c)(1) through (5) of this section.

* * * * *

(5) Approval of an alternative to any electronic reporting to the EPA required by this subpart.

■ 16. Section 63.9824 is amended by revising the definition of ''Particulate matter (PM)'' to read as follows:

§ 63.9824 What definitions apply to this subpart?

* * * * *

Particulate matter (PM) means, for the purposes of this subpart, emissions of particulate matter that serve as a measure of total particulate emissions as measured by EPA Method 5 of 40 CFR part 60, appendix A–3.

* * * * *

■ 17. Table 1 to Subpart SSSSS is revised to read as follows:

Table 1 to Subpart SSSSS of Part 63—Emission Limits

As stated in § 63.9788, you must comply with the emission limits for affected sources in the following table:

For . . .	You must meet the following emission limits . . .
1. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP; each new or existing coking oven and defumer that is used to produce pitch-impregnated refractory products; each new shape preheater that is used to produce pitch-impregnated refractory products; AND each new or existing process unit that is exhausted to a thermal or catalytic oxidizer that also controls emissions from an affected shape preheater or pitch working tank.	As specified in items 2 through 9 of this table.
2. Continuous process units that are controlled with a thermal or catalytic oxidizer.	a. The 3-hour block average THC concentration must not exceed 20 parts per million by volume, dry basis (ppmvd), corrected to 18 percent oxygen, at the outlet of the control device; or b. The 3-hour block average THC mass emissions rate must be reduced by at least 95 percent.
3. Continuous process units that are equipped with a control device other than a thermal or catalytic oxidizer.	a. The 3-hour block average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen, at the outlet of the control device; or b. The 3-hour block average THC mass emissions rate must be reduced by at least 95 percent.
4. Continuous process units that use process changes to reduce organic HAP emissions.	The 3-hour block average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen, at the outlet of the process gas stream.
5. Continuous kilns that are not equipped with a control device.	The 3-hour block average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen, at the outlet of the process gas stream.
6. Batch process units that are controlled with a thermal or catalytic oxidizer.	a. The 2-run block average THC concentration for the 3-hour peak emissions period must not exceed 20 ppmvd, corrected to 18 percent oxygen, at the outlet of the control device; or b. The 2-run block average THC mass emissions rate for the 3-hour peak emissions period must be reduced by at least 95 percent.
7. Batch process units that are equipped with a control device other than a thermal or catalytic oxidizer.	a. The 2-run block average THC concentration for the 3-hour peak emissions period must not exceed 20 ppmvd, corrected to 18 percent oxygen, at the outlet of the control device; or b. The 2-run block average THC mass emissions rate for the 3-hour peak emissions period must be reduced by at least 95 percent.

For . . .	You must meet the following emission limits . . .
8. Batch process units that use process changes to reduce organic HAP emissions.	The 2-run block average THC concentration for the 3-hour peak emissions period must not exceed 20 ppmvd, corrected to 18 percent oxygen, at the outlet of the process gas stream.
9. Batch process kilns that are not equipped with a control device.	The 2-run block average THC concentration for the 3-hour peak emissions period must not exceed 20 ppmvd, corrected to 18 percent oxygen, at the outlet of the process gas stream.
10. Each new continuous kiln that is used to produce clay refractory products.	a. The 3-hour block average HF emissions must not exceed 0.019 kilograms per megagram (kg/Mg) (0.038 pounds per ton (lb/ton)) of uncalcined clay processed, OR the 3-hour block average HF mass emissions rate must be reduced by at least 90 percent; and b. The 3-hour block average HCl emissions must not exceed 0.091 kg/Mg (0.18 lb/ton) of uncalcined clay processed, OR the 3-hour block average HCl mass emissions rate must be reduced by at least 30 percent; and c. The 3-hour block average PM emissions must not exceed 1.4 kg/Mg (3.1 lb/hr); and d. The 3-hour block average Hg concentration must not exceed 6.1 micrograms per dry standard cubic meter (μg/dscm), corrected to 18 percent oxygen, at the outlet of the control device or the process gas stream.
11. Each new batch process kiln that is used to produce clay refractory products.	a. The 2-run block average HF mass emissions rate for the 3-hour peak emissions period must be reduced by at least 90 percent; and b. The 2-run block average HCl mass emissions rate for the 3-hour peak emissions period must be reduced by at least 30 percent; and c. The 2-run block average PM emissions for the 3-hour peak emissions period must not exceed 1.4 kg/Mg (3.1 lb/hr); and d. The 2-run block average Hg concentration for the 3-hour peak emissions period must not exceed 6.1 μg/dscm, corrected to 18 percent oxygen, at the outlet of the control device or the process gas stream.
12. Each existing continuous kiln that is used to produce clay refractory products on and after November 20, 2022.	a. The 3-hour block average PM emissions must not exceed 4.3 kg/Mg (9.5 lb/hr); and b. The 3-hour block average Hg concentration must not exceed 18 μg/dscm, corrected to 18 percent oxygen, at the outlet of the control device or the process gas stream.
13. Each existing batch kiln that is used to produce clay refractory products on and after November 20, 2022.	a. The 2-run block average PM emissions for the 3-hour peak emissions period must not exceed 4.3 kg/Mg (9.5 lb/hr); and b. The 2-run block average Hg concentration for the 3-hour peak emissions period must not exceed 18 μg/dscm, corrected to 18 percent oxygen, at the outlet of the control device or the process gas stream.

■ 18. Table 2 to Subpart SSSSS is revised to read as follows:

Table 2 to Subpart SSSSS of Part 63—Operating Limits

As stated in § 63.9788, you must comply with the operating limits for affected sources in the following table:

For . . .	You must . . .
1. Each affected source listed in Table 1 to this subpart.	a. Operate all affected sources according to the requirements to this subpart on and after the date on which the initial performance test is conducted or required to be conducted, whichever date is earlier; and b. Capture emissions and vent them through a closed system; and c. Operate each control device that is required to comply with this subpart on each affected source during all periods that the source is operating, except where specified in § 63.9792(e), item 2 of this table, item 5 of Table 3 to this subpart, item 13 of Table 4 to this subpart, and item 6 of Table 9 to this subpart for THC control devices on continuous kilns used to manufacture refractory products that use organic HAP; and d. Record all operating parameters specified in Table 8 to this subpart for the affected source; and e. Prepare and implement a written OM&M plan as specified in § 63.9792(d).
2. Each affected continuous kiln used to manufacture refractory products that use organic HAP that is equipped with an emission control device for THC.	a. Receive approval from the Administrator before taking the control device on the affected kiln out of service for scheduled maintenance, as specified in § 63.9792(e); and b. Before May 19, 2022, minimize HAP emissions from the affected kiln during all periods of scheduled maintenance of the kiln control device when the kiln is operating and the control device is out of service; on and after May 19, 2022, you must minimize HAP emissions during the period when the kiln is operating and the control device is out of service by complying with the applicable standard in Table 3 to this subpart; and c. Minimize the duration of all periods of scheduled maintenance of the kiln control device when the kiln is operating and the control device is out of service. On and after May 19, 2022, the total time during which the kiln is operating and the control device is out of service for the each year on a 12-month rolling basis must not exceed 750 hours.

For . . .	You must . . .
3. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP; each new or existing coking oven and defumer that is used to produce pitch-impregnated refractory products; each new shape preheater that is used to produce pitch-impregnated refractory products; AND each new or existing process unit that is exhausted to a thermal or catalytic oxidizer that also controls emissions from an affected shape preheater or pitch working tank.	Satisfy the applicable operating limits specified in items 4 through 9 of this table.
4. Each affected continuous process unit.	Maintain the 3-hour block average organic HAP processing rate (pounds per hour) at or below the maximum organic HAP processing rate established during the most recent performance test.
5. Continuous process units that are equipped with a thermal oxidizer.	Maintain the 3-hour block average operating temperature in the thermal oxidizer combustion chamber at or above the minimum allowable operating temperature for the oxidizer established during the most recent performance test.
6. Continuous process units that are equipped with a catalytic oxidizer.	a. Maintain the 3-hour block average operating temperature at the inlet of the catalyst bed of the oxidizer at or above the minimum allowable operating temperature for the oxidizer established during the most recent performance test; and b. Check the activity level of the catalyst at least every 12 months.
7. Each affected batch process unit	For each batch cycle, maintain the organic HAP processing rate (pounds per batch) at or below the maximum organic HAP processing rate established during the most recent performance test.
8. Batch process units that are equipped with a thermal oxidizer.	a. From the start of each batch cycle until 3 hours have passed since the process unit reached maximum temperature, maintain the hourly average operating temperature in the thermal oxidizer combustion chamber at or above the minimum allowable operating temperature established for the corresponding period during the most recent performance test, as determined according to item 11 of Table 4 to this subpart; and b. For each subsequent hour of the batch cycle, maintain the hourly average operating temperature in the thermal oxidizer combustion chamber at or above the minimum allowable operating temperature established for the corresponding hour during the most recent performance test, as specified in item 13 of Table 4 to this subpart.
9. Batch process units that are equipped with a catalytic oxidizer.	a. From the start of each batch cycle until 3 hours have passed since the process unit reached maximum temperature, maintain the hourly average operating temperature at the inlet of the catalyst bed at or above the minimum allowable operating temperature established for the corresponding period during the most recent performance test, as determined according to item 12 of Table 4 to this subpart; and b. For each subsequent hour of the batch cycle, maintain the hourly average operating temperature at the inlet of the catalyst bed at or above the minimum allowable operating temperature established for the corresponding hour during the most recent performance test, as specified in item 13 of Table 4 to this subpart; and c. Check the activity level of the catalyst at least every 12 months.
10. Each new kiln that is used to process clay refractory products.	Satisfy the applicable operating limits specified in items 11 through 13 of this table.
11. Each affected kiln that is equipped with a DLA.	a. Maintain the 3-hour block average pressure drop across the DLA at or above the minimum levels established during the most recent performance test; and b. Maintain free-flowing limestone in the feed hopper, silo, and DLA at all times; and c. Maintain the limestone feeder at or above the level established during the most recent performance test; and d. Use the same grade of limestone from the same source as was used during the most recent performance test and maintain records of the source and type of limestone used; and e. Maintain no VE from the stack.
12. Each affected kiln that is equipped with a DIFF or DLS/FF.	a. Initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with the OM&M plan; and b. Verify at least once each 8-hour shift that lime is free-flowing by means of a visual check, checking the output of a load cell, carrier gas/lime flow indicator, or carrier gas pressure drop measurement system; and c. Record the lime feeder setting daily to verify that the feeder setting is at or above the level established during the most recent performance test.
13. Each affected kiln that is equipped with a wet scrubber.	a. Maintain the 3-hour block average pressure drop across the scrubber, liquid pH, and liquid flow rate at or above the minimum levels established during the most recent performance test; and b. If chemicals are added to the scrubber liquid, maintain the 3-hour block average chemical feed rate at or above the minimum chemical feed rate established during the most recent performance test.
14. Each new and existing kiln used to process clay refractory products that is equipped with an activated carbon injection system.	Maintain the average carbon flow rate for each 3-hour block period at or above the average carbon flow rate established during the Hg performance test in which compliance was demonstrated.

For . . .	You must . . .
15. Each new and existing kiln that is used to process clay refractory products with no add-on control and each existing kiln that is equipped with a DLA.	Maintain no VE from the stack.
16. Each existing kiln used to process clay refractory products that is equipped with a FF.	Initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with the OM&M plan OR maintain no VE from the stack.
17. Each existing kiln used to process clay refractory products that is equipped with a wet scrubber.	Maintain the 3-hour block average pressure drop across the scrubber and liquid flow rate at or above the minimum levels established during the most recent performance test.

■ 19. Table 3 to Subpart SSSSS is revised to read as follows:

Table 3 to Subpart SSSSS of Part 63—Work Practice Standards

As stated in § 63.9788, you must comply with the work practice standards for affected sources in the following table:

For . . .	You must . . .	According to one of the following requirements . . .
1. Each basket or container that is used for holding fired refractory shapes in an existing shape preheater and autoclave during the pitch impregnation process.	a. Control POM emissions from any affected shape preheater.	i. At least every 10 preheating cycles, clean the residual pitch from the surfaces of the basket or container by abrasive blasting prior to placing the basket or container in the affected shape preheater; or ii. At least every 10 preheating cycles, subject the basket or container to a thermal process cycle that meets or exceeds the operating temperature and cycle time of the affected preheater, AND is conducted in a process unit that is exhausted to a thermal or catalytic oxidizer that is comparable to the control device used on an affected defumer or coking oven; or iii. Capture emissions from the affected shape preheater and vent them to the control device that is used to control emissions from an affected defumer or coking oven, or to a comparable thermal or catalytic oxidizer.
2. Each new or existing pitch working tank	Control POM emissions.	Capture emissions from the affected pitch working tank and vent them to the control device that is used to control emissions from an affected defumer or coking oven, OR to a comparable thermal or catalytic oxidizer.
3. Each new or existing chromium refractory products kiln.	Minimize fuel-based HAP emissions.	Before May 19, 2022, use natural gas, or equivalent, as the kiln fuel, except during periods of natural gas curtailment or supply interruption, as defined in § 63.9824. On and after May 19, 2022, use natural gas, or equivalent, as the kiln fuel at all times.
4. Each existing clay refractory products kiln	Minimize fuel-based HAP emissions.	Before May 19, 2022, use natural gas, or equivalent, as the kiln fuel, except during periods of natural gas curtailment or supply interruption, as defined in § 63.9824. On and after May 19, 2022, use natural gas, or equivalent, as the kiln fuel at all times.
5. Each affected continuous kiln used to manufacture refractory products that use organic HAP that is equipped with an emission control device for THC with Administrator approval to take the control device out of service for scheduled maintenance, as specified in § 63.9792(e).	Minimize HAP emissions.	i. Before May 19, 2022, minimize HAP emissions from the affected kiln during all periods of scheduled maintenance of the kiln control device when the kiln is operating and the control device is out of service consistent with your OM&M plan and minimize the time period during which the kiln is operating and the control device is out of service; or ii. On and after May 19, 2022, minimize HAP emissions during the period when the kiln is operating and the control device is out of service by maintaining the organic HAP processing rate (lb/hr) below the average organic HAP processing rate based on actual production on a 6-month rolling basis (not to include periods of kiln shut down) or below the organic HAP processing rate (lb/hr) that coincides with the lowest hour of the most recent 3-hour performance test, whichever is lower); and minimize the time period during which the kiln is operating and the control device is out of service, not to exceed 750 hours for the year (on a 12-month rolling basis).
6. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP, on and after Novermber 19, 2021.	Minimize fuel-based HAP emissions.	Use natural gas, or equivalent, as the kiln fuel, at all times.

■ 20. Table 4 to Subpart SSSSS is revised to read as follows:

Table 4 to Subpart SSSSS to Part 63—Requirements for Performance Tests

As stated in § 63.9800, you must comply with the requirements for performance tests for affected sources in the following table:

For . . .	You must . . .	Using . . .	According to the following requirements . . .
1. Each affected source listed in Table 1 to this subpart.	a. Conduct performance tests.	i. The requirements of the general provisions in subpart A of this part and the requirements to this subpart.	(1) Record the date of the test; and (2) Identify the emission source that is tested; and (3) Collect and record the corresponding operating parameter and emission test data listed in this table for each run of the performance test; and (4) Repeat the performance test at least every 5 years; and (5) Repeat the performance test before changing the parameter value for any operating limit specified in your OM&M plan; and (6) If complying with the THC concentration or THC percentage reduction limits specified in items 2 through 9 of Table 1 to this subpart, repeat the performance test under the conditions specified in items 2.a.2. and 2.a.3. of this table; and (7) If complying with the emission limits for new clay refractory products kilns specified in items 10 and 11 of Table 1 to this subpart, repeat the performance test under the conditions specified in items 14.a.i.4. and 17.a.i.4. of this table.
	b. Select the locations of sampling ports and the number of traverse points.	i. Method 1 or 1A of 40 CFR part 60, appendix A–1.	(1) To demonstrate compliance with the percentage reduction limits specified in items 2.b., 3.b., 6.b., 7.b., 10, and 11 of Table 1 to this subpart, locate sampling sites at the inlet of the control device and at either the outlet of the control device or at the stack prior to any releases to the atmosphere; and (2) To demonstrate compliance with any other emission limit specified in Table 1 to this subpart, locate all sampling sites at the outlet of the control device or at the stack prior to any releases to the atmosphere.
	c. Determine gas velocity and volumetric flow rate.	Method 2, 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A–1 and A–2.	Measure gas velocities and volumetric flow rates at 1-hour intervals throughout each test run.
	d. Conduct gas molecular weight analysis.	i. Method 3, 3A, or 3B of 40 CFR part 60, appendix A–2; or. ii. ASME PTC 19.10–1981—Part 10 [a]	As specified in the applicable test method. You may use the manual procedures (but not instrumental procedures) of ASME PTC 19.10–1981—Part 10 [a] as an alternative to EPA Method 3B.
	e. Measure gas moisture content.	Method 4 of 40 CFR part 60, appendix A–3.	As specified in the applicable test method.

For . . .	You must . . .	Using . . .	According to the following requirements . . .
2. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP; each new or existing coking oven and defumer that is used to produce pitch-impregnated refractory products; each new shape preheater that is used to produce pitch-impregnated refractory products; AND each new or existing process unit that is exhausted to a thermal or catalytic oxidizer that also controls emissions from an affected shape preheater or pitch working tank.	a. Conduct performance tests.	.....	(1) Conduct the performance test while the source is operating at the maximum organic HAP processing rate, as defined in § 63.9824, reasonably expected to occur; and (2) Repeat the performance test before starting production of any product for which the organic HAP processing rate is likely to exceed the maximum organic HAP processing rate established during the most recent performance test by more than 10 percent, as specified in § 63.9798(c); and (3) Repeat the performance test on any affected uncontrolled kiln following process changes (*e.g.,* shorter curing oven cycle time) that could increase organic HAP emissions from the affected kiln, as specified in § 63.9798(d).
	b. Satisfy the applicable requirements listed in items 3 through 13 of this table.		
3. Each affected continuous process unit.	a. Perform a minimum of 3 test runs.	The appropriate test methods specified in items 1, 4, and 5 of this table.	Each test run must be at least 1 hour in duration.
	b. Establish the operating limit for the maximum organic HAP processing rate.	i. Method 311 of 40 CFR part 63, appendix A, OR material safety data sheets (MSDS), OR product labels to determine the mass fraction of organic HAP in each resin, binder, or additive; and	(1) Calculate and record the organic HAP content of all refractory shapes that are processed during the performance test, based on the mass fraction of organic HAP in the resins, binders, or additives; the mass fraction of each resin, binder, or additive, in the product; and the process feed rate; and
		ii. Product formulation data that specify the mass fraction of each resin, binder, and additive in the products that are processed during the performance test; and.	(2) Calculate and record the organic HAP processing rate (pounds per hour) for each test run; and
		iii. Process feed rate data (tons per hour).	(3) Calculate and record the maximum organic HAP processing rate as the average of the organic HAP processing rates for the three test runs.
	c. Record the operating temperature of the affected source.	Process data	During each test run and at least once per hour, record the operating temperature in the highest temperature zone of the affected source.
4. Each continuous process unit that is subject to the THC emission limit listed in item 2.a., 3.a., 4, or 5 of Table 1 to this subpart.	a. Measure THC concentrations at the outlet of the control device or in the stack.	i. Method 25A of 40 CFR part 60, appendix A–7.	(1) Each minute, measure and record the concentrations of THC in the exhaust stream; and (2) Provide at least 50 1-minute measurements for each valid hourly average THC concentration.
	b. Measure oxygen concentrations at the outlet of the control device or in the stack.	i. Method 3A of 40 CFR part 60, appendix A–2.	(1) Each minute, measure and record the concentrations of oxygen in the exhaust stream; and (2) Provide at least 50 1-minute measurements for each valid hourly average THC concentration.

For . . .	You must . . .	Using . . .	According to the following requirements . . .
	c. Determine the hourly average THC concentration, corrected to 18 percent oxygen.	i. Equation 1 of § 63.9800(g)(1); and ii. The 1-minute THC and oxygen concentration data.	(1) Calculate the hourly average THC concentration for each hour of the performance test as the average of the 1-minute THC measurements; and (2) Calculate the hourly average oxygen concentration for each hour of the performance test as the average of the 1-minute oxygen measurements; and (3) Correct the hourly average THC concentrations to 18 percent oxygen using Equation 1 of § 63.9800(g)(1).
	d. Determine the 3-hour block average THC emission concentration, corrected to 18 percent oxygen.	The hourly average concentration of THC, corrected to 18 percent oxygen, for each test run.	Calculate the 3-hour block average THC emission concentration, corrected to 18 percent oxygen, as the average of the hourly average THC emission concentrations, corrected to 18 percent oxygen.
5. Each continuous process unit that is subject to the THC percentage reduction limit listed in item 2.b. or 3.b. of Table 1 to this subpart.	a. Measure THC concentrations at the inlet and outlet of the control device.	i. Method 25A of 40 CFR part 60, appendix A–7.	(1) Each minute, measure and record the concentrations of THC at the inlet and outlet of the control device; and (2) Provide at least 50 1-minute measurements for each valid hourly average THC concentration at the control device inlet and outlet.
	b. Determine the hourly THC mass emissions rates at the inlet and outlet of the control device.	i. The 1-minute THC concentration data at the control device inlet and outlet; and ii. The volumetric flow rates at the control device inlet and outlet.	Calculate the hourly THC mass emissions rates at the control device inlet and outlet for each hour of the performance test.
	c. Determine the 3-hour block average THC percentage reduction.	i. The hourly THC mass emissions rates at the inlet and outlet of the control device.	(1) Calculate the hourly THC percentage reduction for each hour of the performance test using Equation 2 of § 63.9800(g)(1); and (2) Calculate the 3-hour block average THC percentage reduction.
6. Each continuous process unit that is equipped with a thermal oxidizer.	a. Establish the operating limit for the minimum allowable thermal oxidizer combustion chamber temperature.	i. Continuous recording of the output of the combustion chamber temperature measurement device.	(1) At least every 15 minutes, measure and record the thermal oxidizer combustion chamber temperature; and (2) Provide at least one measurement during at least three 15-minute periods per hour of testing; and (3) Calculate the hourly average thermal oxidizer combustion chamber temperature for each hour of the performance test; and (4) Calculate the minimum allowable combustion chamber temperature as the average of the combustion chamber temperatures for the three test runs, minus 14 °C (25 °F).
7. Each continuous process unit that is equipped with a catalytic oxidizer.	a. Establish the operating limit for the minimum allowable temperature at the inlet of the catalyst bed.	i. Continuous recording of the output of the temperature measurement device.	(1) At least every 15 minutes, measure and record the temperature at the inlet of the catalyst bed; and (2) Provide at least one catalyst bed inlet temperature measurement during at least three 15-minute periods per hour of testing; and (3) Calculate the hourly average catalyst bed inlet temperature for each hour of the performance test; and (4) Calculate the minimum allowable catalyst bed inlet temperature as the average of the catalyst bed inlet temperatures for the three test runs, minus 14 °C (25 °F).
8. Each affected batch process unit.	a. Perform a minimum of two test runs.	i. The appropriate test methods specified in items 1, 9, and 10 of this table.	(1) Each test run must be conducted over a separate batch cycle unless you satisfy the requirements of § 63.9800(f)(3) and (4); and (2) Each test run must begin with the start of a batch cycle, except as specified in item 8.a.i.4. of this table; and (3) Each test run must continue until the end of the batch cycle, except as specified in items 8.a.i.4. and 8.a.i.5. of this table; and (4) If you develop an emissions profile, as described in § 63.9802(a), AND for sources equipped with a thermal or catalytic oxidizer, you do not reduce the oxidizer operating temperature, as specified in item 13 of this table, you can limit each test run to the 3-hour peak THC emissions period; and

For . . .	You must . . .	Using . . .	According to the following requirements . . .
			(5) If you do not develop an emissions profile, a test run can be stopped, and the results of that run considered complete, if you measure emissions continuously until at least 3 hours after the affected process unit has reached maximum temperature, AND the hourly average THC mass emissions rate has not increased during the 3-hour period since maximum process temperature was reached, and the hourly average concentrations of THC at the inlet of the control device have not exceeded 20 ppmvd, corrected to 18 percent oxygen, during the 3-hour period since maximum process temperature was reached or the hourly average THC percentage reduction has been at least 95 percent during the 3-hour period since maximum process temperature was reached, AND, for sources equipped with a thermal or catalytic oxidizer, at least 1 hour has passed since any reduction in the operating temperature of the oxidizer, as specified in item 13 of this table.
	b. Establish the operating limit for the maximum organic HAP processing rate.	i. Method 311 of 40 CFR part 63, appendix A, OR MSDS, OR product labels to determine the mass fraction of organic HAP in each resin, binder, or additive; and	(1) Calculate and record the organic HAP content of all refractory shapes that are processed during the performance test, based on the mass fraction of HAP in the resins, binders, or additives; the mass fraction of each resin, binder, or additive, in the product, and the batch weight prior to processing; and
		ii. Product formulation data that specify the mass fraction of each resin, binder, and additive in the products that are processed during the performance test; and.	(2) Calculate and record the organic HAP processing rate (pounds per batch) for each test run; and
		iii. Batch weight (tons)	(3) Calculate and record the maximum organic HAP processing rate as the average of the organic HAP processing rates for the two test runs.
	c. Record the batch cycle time.	Process data	Record the total elapsed time from the start to the completion of the batch cycle.
	d. Record the operating temperature of the affected source.	Process data	Record the operating temperature of the affected source at least once every hour from the start to the completion of the batch cycle.
9. Each batch process unit that is subject to the THC emission limit listed in item 6.a., 7.a., 8, or 9 of Table 1 to this subpart.	a. Measure THC concentrations at the outlet of the control device or in the stack.	i. Method 25A of 40 CFR part 60, appendix A–7.	(1) Each minute, measure and record the concentrations of THC in the exhaust stream; and (2) Provide at least 50 1-minute measurements for each valid hourly average THC concentration.
	b. Measure oxygen concentrations at the outlet of the control device or in the stack.	i. Method 3A of 40 CFR part 60, appendix A–2.	(1) Each minute, measure and record the concentrations of oxygen in the exhaust stream; and (2) Provide at least 50 1-minute measurements for each valid hourly average oxygen concentration.
	c. Determine the hourly average THC concentration, corrected to 18 percent oxygen.	i. Equation 1 of § 63.9800(g)(1); and ii. The 1-minute THC and oxygen concentration data.	(1) Calculate the hourly average THC concentration for each hour of the performance test as the average of the 1-minute THC measurements; and (2) Calculate the hourly average oxygen concentration for each hour of the performance test as the average of the 1-minute oxygen measurements; and (3) Correct the hourly average THC concentrations to 18 percent oxygen using Equation 1 of § 63.9800(g)(1).
	d. Determine the 3-hour peak THC emissions period for each test run.	The hourly average THC concentrations, corrected to 18 percent oxygen.	Select the period of 3 consecutive hours over which the sum of the hourly average THC concentrations, corrected to 18 percent oxygen, is greater than the sum of the hourly average THC emission concentrations, corrected to 18 percent oxygen, for any other period of 3 consecutive hours during the test run.
	e. Determine the average THC concentration, corrected to 18 percent oxygen, for each test run.	The hourly average THC emission concentrations, corrected to 18 percent oxygen, for the 3-hour peak THC emissions period.	Calculate the average of the hourly average THC concentrations, corrected to 18 percent oxygen, for the 3 hours of the peak emissions period for each test run.

For . . .	You must . . .	Using . . .	According to the following requirements . . .
	f. Determine the 2-run block average THC concentration, corrected to 18 percent oxygen, for the emission test.	The average THC concentration, corrected to 18 percent oxygen, for each test run.	Calculate the average of the average THC concentrations, corrected to 18 percent oxygen, for each run.
10. Each batch process unit that is subject to the THC percentage reduction limit listed in item 6.b. or 7.b. of Table 1 to this subpart.	a. Measure THC concentrations at the inlet and outlet of the control device.	i. Method 25A of 40 CFR part 60, appendix A–7.	(1) Each minute, measure and record the concentrations of THC at the control device inlet and outlet; and (2) Provide at least 50 1-minute measurements for each valid hourly average THC concentration at the control device inlet and outlet.
	b. Determine the hourly THC mass emissions rates at the control device inlet and outlet.	i. The 1-minute THC concentration data at the control device inlet and outlet; and ii. The volumetric flow rates at the control device inlet and outlet.	(1) Calculate the hourly mass emissions rates at the control device inlet and outlet for each hour of the performance test.
	c. Determine the 3-hour peak THC emissions period for each test run.	The hourly THC mass emissions rates at the control device inlet.	Select the period of 3 consecutive hours over which the sum of the hourly THC mass emissions rates at the control device inlet is greater than the sum of the hourly THC mass emissions rates at the control device inlet for any other period of 3 consecutive hours during the test run.
	d. Determine the average THC percentage reduction for each test run.	i. Equation 2 of § 63.9800(g)(2); and ii. The hourly THC mass emissions rates at the control device inlet and outlet for the 3-hour peak THC emissions period.	Calculate the average THC percentage reduction for each test run using Equation 2 of § 63.9800(g)(2).
	e. Determine the 2-run block average THC percentage reduction for the emission test.	The average THC percentage reduction for each test run.	Calculate the average of the average THC percentage reductions for each test run.
11. Each batch process unit that is equipped with a thermal oxidizer.	a. Establish the operating limit for the minimum thermal oxidizer combustion chamber temperature.	i. Continuous recording of the output of the combustion chamber temperature measurement device.	(1) At least every 15 minutes, measure and record the thermal oxidizer combustion chamber temperature; and (2) Provide at least one temperature measurement during at least three 15-minute periods per hour of testing; and (3) Calculate the hourly average combustion chamber temperature for each hour of the 3-hour peak emissions period, as defined in item 9.d. or 10.c. of this table, whichever applies; and (4) Calculate the minimum allowable thermal oxidizer combustion chamber operating temperature as the average of the hourly combustion chamber temperatures for the 3-hour peak emissions period, minus 14 °C (25 °F).
12. Each batch process unit that is equipped with a catalytic oxidizer.	a. Establish the operating limit for the minimum temperature at the inlet of the catalyst bed.	i. Continuous recording of the output of the temperature measurement device.	(1) At least every 15 minutes, measure and record the temperature at the inlet of the catalyst bed; and (2) Provide at least one catalyst bed inlet temperature measurement during at least three 15-minute periods per hour of testing; and (3) Calculate the hourly average catalyst bed inlet temperature for each hour of the 3-hour peak emissions period, as defined in item 9.d. or 10.c. of this table, whichever applies; and (4) Calculate the minimum allowable catalytic oxidizer catalyst bed inlet temperature as the average of the hourly catalyst bed inlet temperatures for the 3-hour peak emissions period, minus 14 °C (25 °F).

For . . .	You must . . .	Using . . .	According to the following requirements . . .
13. Each batch process unit that is equipped with a thermal or catalytic oxidizer.	a. During each test run, maintain the applicable operating temperature of the oxidizer until emission levels allow the oxidizer to be shut off or the operating temperature of the oxidizer to be reduced.	.....	(1) The oxidizer can be shut off or the oxidizer operating temperature can be reduced if you do not use an emission profile to limit testing to the 3-hour peak emissions period, as specified in item 8.a.i.4. of this table; and (2) At least 3 hours have passed since the affected process unit reached maximum temperature; and (3) The applicable emission limit specified in item 6.a. or 6.b. of Table 1 to this subpart was met during each of the previous three 1-hour periods; and (4) The hourly average THC mass emissions rate did not increase during the 3-hour period since maximum process temperature was reached; and (5) The applicable emission limit specified in item 6.a. and 6.b. of Table 1 to this subpart was met during each of the four 15-minute periods immediately following the oxidizer temperature reduction; and (6) If the applicable emission limit specified in item 6.a. or 6.b. of Table 1 to this subpart was not met during any of the four 15-minute periods immediately following the oxidizer temperature reduction, you must return the oxidizer to its normal operating temperature as soon as possible and maintain that temperature for at least 1 hour; and (7) Continue the test run until the applicable emission limit specified in items 6.a. and 6.b. of Table 1 to this subpart is met for at least four consecutive 15-minute periods that immediately follow the temperature reduction; and (8) Calculate the hourly average oxidizer operating temperature for each hour of the performance test since the affected process unit reached maximum temperature.
14. Each new continuous kiln that is used to process clay refractory products.	a. Measure emissions of HF and HCl.	i. Method 26A of 40 CFR part 60, appendix A–8; or. ii. Method 26 of 40 CFR part 60, appendix A–8; or. iii. Method 320 of 40 CFR part 63, appendix A	(1) Conduct the test while the kiln is operating at the maximum production level; and (2) You may use EPA Method 26 of 40 CFR part 60, appendix A–8, only if no acid PM (*e.g.,* HF or HCl dissolved in water droplets emitted by sources controlled by a wet scrubber) is present; and (3) If you use EPA Method 320 of 40 CFR part 63, appendix A, you must follow the analyte spiking procedures of Section 13 of EPA Method 320 unless you can demonstrate that the complete spiking procedure has been conducted at a similar source. ASTM D6348–12e1 [a] may be used as an alternative to EPA Method 320 if the test plan preparation and implementation in Annexes A1–A8 are mandatory and the %R in Annex A5 is determined for each target analyte and is equal or greater than 70 percent and less than or equal to 130 percent; and (4) Repeat the performance test if the affected source is controlled with a DLA and you change the source of the limestone used in the DLA.
	b. Perform a minimum of 3 test runs.	The appropriate test methods specified in items 1 and 14.a. of this table.	Each test run must be at least 1 hour in duration.
15. Each new continuous kiln that is subject to the production-based HF and HCl emission limits specified in items 10.a. and 10.b. of Table 1 to this subpart.	a. Record the uncalcined clay processing rate.	i. Production data; and ii. Product formulation data that specify the mass fraction of uncalcined clay in the products that are processed during the performance test.	(1) Record the production rate (tons per hour of fired product); and (2) Calculate and record the average rate at which uncalcined clay is processed (tons per hour) for each test run; and (3) Calculate and record the 3-run average uncalcined clay processing rate as the average of the average uncalcined clay processing rates for each test run.
	b. Determine the HF mass emissions rate at the outlet of the control device or in the stack.	i. Method 26A of 40 CFR part 60, appendix A–8; or. ii. Method 26 of 40 CFR part 60, appendix A–8; or. iii. Method 320 of 40 CFR part 63, appendix A	Calculate the HF mass emissions rate for each test. ASTM D6348–12e1 [a] may be used as an alternative to EPA Method 320 if the test plan preparation and implementation in Annexes A1–A8 are mandatory and the %R in Annex A5 is determined for each target analyte and is equal or greater than 70 percent and less than or equal to 130 percent.

For . . .	You must . . .	Using . . .	According to the following requirements . . .
	c. Determine the 3-hour block average production-based HF emissions rate.	i. The HF mass emissions rate for each test run; and. ii. The average uncalcined clay processing rate	(1) Calculate the hourly production-based HF emissions rate for each test run using Equation 3 of § 63.9800(g)(3); and (2) Calculate the 3-hour block average production-based HF emissions rate as the average of the hourly production-based HF emissions rates for each test run.
	d. Determine the HCl mass emissions rate at the outlet of the control device or in the stack.	i. Method 26A of 40 CFR part 60, appendix A–8; or. ii. Method 26 of 40 CFR part 60, appendix A–8; or. iii. Method 320 of 40 CFR part 63, appendix A	Calculate the HCl mass emissions rate for each test run. ASTM D6348–12e1 [a] may be used as an alternative to EPA Method 320 if the test plan preparation and implementation in Annexes A1–A8 are mandatory and the %R in Annex A5 is determined for each target analyte and is equal or greater than 70 percent and less than or equal to 130 percent.
	e. Determine the 3-hour block average production-based HCl emissions rate.	i. The HCl mass emissions rate for each test run; and. ii. The average uncalcined clay processing rate	(1) Calculate the hourly production-based HCl emissions rate for each test run using Equation 3 of § 63.9800(g)(3); and (2) Calculate the 3-hour block average production-based HCl emissions rate as the average of the production-based HCl emissions rates for each test run.
16. Each new continuous kiln that is subject to the HF and HCl percentage reduction limits specified in items 10.a. and 10.b. of Table 1 to this subpart.	a. Measure the HF mass emissions rates at the inlet and outlet of the control device.	i. Method 26A of 40 CFR part 60, appendix A–8; or. ii. Method 26 of 40 CFR part 60, appendix A–8; or. iii. Method 320 of 40 CFR part 63, appendix A	Calculate the HF mass emissions rates at the control device inlet and outlet for each test run. ASTM D6348–12e1 [a] may be used as an alternative to EPA Method 320 if the test plan preparation and implementation in Annexes A1–A8 are mandatory and the %R in Annex A5 is determined for each target analyte and is equal or greater than 70 percent and less than or equal to 130 percent.
	b. Determine the 3-hour block average HF percentage reduction.	i. The HF mass emissions rates at the inlet and outlet of the control device for each test run.	(1) Calculate the hourly HF percentage reduction using Equation 2 of § 63.9800(g)(2); and (2) Calculate the 3-hour block average HF percentage reduction as the average of the HF percentage reductions for each test run.
	c. Measure the HCl mass emissions rates at the inlet and outlet of the control device.	i. Method 26A of 40 CFR part 60, appendix A–8; or. ii. Method 26 of 40 CFR part 60, appendix A–8; or. iii. Method 320 of 40 CFR part 63, appendix A	Calculate the HCl mass emissions rates at the control device inlet and outlet for each test run. ASTM D6348–12e1 [a] may be used as an alternative to EPA Method 320 if the test plan preparation and implementation in Annexes A1–A8 are mandatory and the %R in Annex A5 is determined for each target analyte and is equal or greater than 70 percent and less than or equal to 130 percent.
	d. Determine the 3-hour block average HCl percentage reduction..	i. The HCl mass emissions rates at the inlet and outlet of the control device for each test run.	(1) Calculate the hourly HCl percentage reduction using Equation 2 of § 63.9800(g)(2); and (2) Calculate the 3-hour block average HCl percentage reduction as the average of HCl percentage reductions for each test run.
17. Each new batch process kiln that is used to process clay refractory products.	a. Measure emissions of HF and HCl at the inlet and outlet of the control device.	i. Method 26A of 40 CFR part 60, appendix A–8; or. ii. Method 26 of 40 CFR part 60, appendix A–8; or. iii. Method 320 of 40 CFR part 63, appendix A	(1) Conduct the test while the kiln is operating at the maximum production level; and (2) You may use EPA Method 26 of 40 CFR part 60, appendix A, only if no acid PM (*e.g.,* HF or HCl dissolved in water droplets emitted by sources controlled by a wet scrubber) is present; and (3) If you use EPA Method 320 of 40 CFR part 63, you must follow the analyte spiking procedures of Section 13 of EPA Method 320 unless you can demonstrate that the complete spiking procedure has been conducted at a similar source ASTM D6348–12e1 [a] may be used as an alternative to EPA Method 320 if the test plan preparation and implementation in Annexes A1–A8 are mandatory and the %R in Annex A5 is determined for each target analyte and is equal or greater than 70 percent and less than or equal to 130 percent.; and (4) Repeat the performance test if the affected source is controlled with a DLA and you change the source of the limestone used in the DLA.
	b. Perform a minimum of 2 test runs.	i. The appropriate test methods specified in items 1 and 17.a. of this table.	(1) Each test run must be conducted over a separate batch cycle unless you satisfy the requirements of § 63.9800(f)(3) and (4); and (2) Each test run must consist of a series of 1-hour runs at the inlet and outlet of the control device, beginning with the start of a batch cycle, except as specified in item 17.b.i.4. of this table; and

For . . .	You must . . .	Using . . .	According to the following requirements . . .
			(3) Each test run must continue until the end of the batch cycle, except as specified in item 17.b.i.4. of this table; and (4) If you develop an emissions profile, as described in § 63.9802(b), you can limit each test run to the 3-hour peak HF emissions period.
	c. Determine the hourly HF and HCl mass emissions rates at the inlet and outlet of the control device.	i. The appropriate test methods specified in items 1 and 17.a. of this table.	Determine the hourly mass HF and HCl emissions rates at the inlet and outlet of the control device for each hour of each test run.
	d. Determine the 3-hour peak HF emissions period.	The hourly HF mass emissions rates at the inlet of the control device.	Select the period of 3 consecutive hours over which the sum of the hourly HF mass emissions rates at the control device inlet is greater than the sum of the hourly HF mass emissions rates at the control device inlet for any other period of 3 consecutive hours during the test run.
	e. Determine the 2-run block average HF percentage reduction for the emissions test.	i. The hourly average HF emissions rates at the inlet and outlet of the control device.	(1) Calculate the HF percentage reduction for each hour of the 3-hour peak HF emissions period using Equation 2 of § 63.9800(g)(2); and (2) Calculate the average HF percentage reduction for each test run as the average of the hourly HF percentage reductions for the 3-hour peak HF emissions period for that run; and (3) Calculate the 2-run block average HF percentage reduction for the emission test as the average of the average HF percentage reductions for the two test runs.
	f. Determine the 2-run block average HCl percentage reduction for the emission test.	i. The hourly average HCl emissions rates at the inlet and outlet of the control device.	(1) Calculate the HCl percentage reduction for each hour of the 3-hour peak HF emissions period using Equation 2 § 63.9800(g)(2); and (2) Calculate the average HCl percentage reduction for each test run as the average of the hourly HCl percentage reductions for the 3-hour peak HF emissions period for that run; and (3) Calculate the 2-run block average HCl percentage reduction for the emission test as the average of the average HCl percentage reductions for the two test runs.
18. Each new kiln that is used to process clay refractory products and is equipped with a DLA.	a. Establish the operating limit for the minimum pressure drop across the DLA.	Data from the pressure drop measurement device during the performance test.	(1) At least every 15 minutes, measure the pressure drop across the DLA; and (2) Provide at least one pressure drop measurement during at least three 15-minute periods per hour of testing; and (3) Calculate the hourly average pressure drop across the DLA for each hour of the performance test; and (4) Calculate and record the minimum pressure drop as the average of the hourly average pressure drops across the DLA for the two or three test runs, whichever applies.
	b. Establish the operating limit for the limestone feeder setting.	Data from the limestone feeder during the performance test.	(1) Ensure that limestone in the feed hopper, silo, and DLA is free-flowing at all times during the performance test; and (2) Establish the limestone feeder setting 1 week prior to the performance test; and (3) Record and maintain the feeder setting for the 1-week period that precedes the performance test and during the performance test.
19. Each new kiln that is used to process clay refractory products and is equipped with a DIFF or DLS/FF.	a. Document conformance with specifications and requirements of the bag leak detection system.	Data from the installation and calibration of the bag leak detection system.	Submit analyses and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems as part of the Notification of Compliance Status.
	b. Establish the operating limit for the lime feeder setting.	i. Data from the lime feeder during the performance test.	(1) For continuous lime injection systems, ensure that lime in the feed hopper or silo is free-flowing at all times during the performance test; and (2) Record the feeder setting for the three test runs; and (3) If the feed rate setting varies during the three test runs, calculate and record the average feed rate for the two or three test runs, whichever applies.

For . . .	You must . . .	Using . . .	According to the following requirements . . .
20. Each new kiln that is used to process clay refractory products and is equipped with a wet scrubber.	a. Establish the operating limit for the minimum scrubber pressure drop.	i. Data from the pressure drop measurement device during the performance test.	(1) At least every 15 minutes, measure the pressure drop across the scrubber; and (2) Provide at least one pressure drop measurement during at least three 15-minute periods per hour of testing; and (3) Calculate the hourly average pressure drop across the scrubber for each hour of the performance test; and (4) Calculate and record the minimum pressure drop as the average of the hourly average pressure drops across the scrubber for the two or three test runs, whichever applies.
	b. Establish the operating limit for the minimum scrubber liquid pH.	i. Data from the pH measurement device during the performance test.	(1) At least every 15 minutes, measure scrubber liquid pH; and (2) Provide at least one pH measurement during at least three 15-minute periods per hour of testing; and (3) Calculate the hourly average pH values for each hour of the performance test; and (4) Calculate and record the minimum liquid pH as the average of the hourly average pH measurements for the two or three test runs, whichever applies.
	c. Establish the operating limit for the minimum scrubber liquid flow rate.	i. Data from the flow rate measurement device during the performance test.	(1) At least every 15 minutes, measure the scrubber liquid flow rate; and (2) Provide at least one flow rate measurement during at least three 15-minute periods per hour of testing; and (3) Calculate the hourly average liquid flow rate for each hour of the performance test; and (4) Calculate and record the minimum liquid flow rate as the average of the hourly average liquid flow rates for the two or three test runs, whichever applies.
	d. If chemicals are added to the scrubber liquid, establish the operating limit for the minimum scrubber chemical feed rate.	i. Data from the chemical feed rate measurement device during the performance test.	(1) At least every 15 minutes, measure the scrubber chemical feed rate; and (2) Provide at least one chemical feed rate measurement during at least three 15-minute periods per hour of testing; and (3) Calculate the hourly average chemical feed rate for each hour of the performance test; and (4) Calculate and record the minimum chemical feed rate as the average of the hourly average chemical feed rates for the two or three test runs, whichever applies.
21. Each new and existing kiln that is used to process clay refractory products that is subject to the PM limits specified in items 10.c. 11.c, 12.a, and 13.a of Table 1 to this subpart.	Measure PM emissions.	Method 5 of 40 CFR part 60, appendix A–3.	
22. Each new and existing kiln that is used to process clay refractory products that is subject to the Hg limits specified in items 10.d. 11.d, 12.b, and 13.b of Table 1 to this subpart.	Measure Hg emissions.	Method 29 of 40 CFR part 60, appendix A–8.	ASTM D6784–16 [a] may be used as an alternative to EPA Method 29 (portion for Hg only).
23. Each new and existing kiln that is used to process clay refractory products and is equipped with an activated carbon injection system.	Establish the operating limit for the average carbon flow rate.	Data from the carbon flow rate measurement conducted during the Hg performance test.	You must measure the carbon flow rate during each test run, determine and record the block average carbon flow rate values for the three test runs, and determine and record the 3-hour block average of the recorded carbon flow rate measurements for the three test runs. The average of the three test runs establishes your minimum site-specific activated carbon flow rate operating limit.

For . . .	You must . . .	Using . . .	According to the following requirements . . .
24. Each existing kiln that is used to process clay refractory products and is equipped with a FF and a bag leak detection system.	Document conformance with specifications and requirements of the bag leak detection system.	Data from the installation and calibration of the bag leak detection system.	Submit analyses and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems as part of the Notification of Compliance Status.
25. Each existing kiln that is used to process clay refractory products and is equipped with a wet scrubber.	a. Establish the operating limit for the minimum scrubber pressure drop.	i. Data from the pressure drop measurement device during the performance test.	(1) At least every 15 minutes, measure the pressure drop across the scrubber; and (2) Provide at least one pressure drop measurement during at least three 15-minute periods per hour of testing; and (3) Calculate the hourly average pressure drop across the scrubber for each hour of the performance test; and (4) Calculate and record the minimum pressure drop as the average of the hourly average pressure drops across the scrubber for the two or three test runs, whichever applies.
	b. Establish the operating limit for the minimum scrubber liquid flow rate.	i. Data from the flow rate measurement device during the performance test.	(1) At least every 15 minutes, measure the scrubber liquid flow rate; and (2) Provide at least one flow rate measurement during at least three 15-minute periods per hour of testing; and (3) Calculate the hourly average liquid flow rate for each hour of the performance test; and (4) Calculate and record the minimum liquid flow rate as the average of the hourly average liquid flow rates for the two or three test runs, whichever applies.

[a] Incorporated by reference, see § 63.14.

■ 21. Table 5 to Subpart SSSSS is revised to read as follows:

Table 5 to Subpart SSSSS of Part 63—Initial Compliance With Emission Limits

As stated in § 63.9806, you must show initial compliance with the emission limits for affected sources according to the following table:

For . . .	For the following emission limit . . .	You have demonstrated compliance if . . .
1. Each affected source listed in Table 1 to this subpart.	a. Each applicable emission limit listed in Table 1 to this subpart.	i. Emissions measured using the test methods specified in Table 4 to this subpart satisfy the applicable emission limits specified in Table 1 to this subpart; and ii. You establish and have a record of the operating limits listed in Table 2 to this subpart over the performance test period; and iii. You report the results of the performance test in the Notification of Compliance Status, as specified by § 63.9812(e)(1) and (2).
2. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP; each new or existing coking oven and defumer that is used to produce pitch-impregnated refractory products; each new shape preheater that is used to produce pitch-impregnated refractory products; AND each new or existing process unit that is exhausted to a thermal or catalytic oxidizer that also controls emissions from an affected shape preheater or pitch working tank.	As specified in items 3 through 8 of this table.	You have satisfied the applicable requirements specified in items 3 through 8 of this table.
3. Each affected continuous process unit that is subject to the THC emission concentration limit listed in item 2.a., 3.a., 4, or 5 of Table 1 to this subpart.	The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen.	The 3-hour block average THC emission concentration measured during the performance test using EPA Methods 25A and 3A is equal to or less than 20 ppmvd, corrected to 18 percent oxygen.

For . . .	For the following emission limit . . .	You have demonstrated compliance if . . .
4. Each affected continuous process unit that is subject to the THC percentage reduction limit listed in item 2.b. or 3.b. of Table 1 to this subpart.	The average THC percentage reduction must equal or exceed 95 percent.	The 3-hour block average THC percentage reduction measured during the performance test using EPA Method 25A is equal to or greater than 95 percent.
5. Each affected batch process unit that is subject to the THC emission concentration limit listed in item 6.a., 7.a., 8, or 9 of Table 1 to this subpart.	The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen.	The 2-run block average THC emission concentration for the 3-hour peak emissions period measured during the performance test using EPA Methods 25A and 3A is equal to or less than 20 ppmvd, corrected to 18 percent oxygen.
6. Each affected batch process unit that is subject to the THC percentage reduction limit listed in item 6.b. or 7.b. of Table 1 to this subpart.	The average THC percentage reduction must equal or exceed 95 percent.	The 2-run block average THC percentage reduction for the 3-hour peak emissions period measured during the performance test using EPA Method 25A is equal to or exceeds 95 percent.
7. Each affected continuous or batch process unit that is equipped with a control device other than a thermal or catalytic oxidizer and is subject to the emission limit listed in item 3 or 7 of Table 1 to this subpart.	a. The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen; or b. The average THC percentage reduction must equal or exceed 95 percent.	i. You have installed a THC CEMS at the outlet of the control device or in the stack of the affected source; and ii. You have satisfied the requirements of PS–8 of 40 CFR part 60, appendix B.
8. Each affected continuous or batch process unit that uses process changes to reduce organic HAP emissions and is subject to the emission limit listed in item 4 or 8 of Table 1 to this subpart.	The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen.	i. You have installed a THC CEMS at the outlet of the control device or in the stack of the affected source; and ii. You have satisfied the requirements of PS–8 of 40 CFR part 60, appendix B.
9. Each new continuous kiln that is used to process clay refractory products.	a. The average HF emissions must not exceed 0.019 kg/Mg (0.038 lb/ton) of uncalcined clay processed; OR the average uncontrolled HF emissions must be reduced by at least 90 percent.	i. The 3-hour block average production-based HF emissions rate measured during the performance test using one of the methods specified in item 14.a.i. of Table 4 to this subpart is equal to or less than 0.019 kg/Mg (0.038 lb/ton) of uncalcined clay processed; or The 3-hour block average HF emissions reduction measured during the performance test is equal to or greater than 90 percent.
	b. The average HCl emissions must not exceed 0.091 kg/Mg (0.18 lb/ton) of uncalcined clay processed; OR the average uncontrolled HCl emissions must be reduced by at least 30 percent.	i. The 3-hour block average production-based HCl emissions rate measured during the performance test using one of the methods specified in item 14.a.i. of Table 4 to this subpart is equal to or less than 0.091 kg/Mg (0.18 lb/ton) of uncalcined clay processed; or ii. The 3-hour block average HCl emissions reduction measured during the performance test is equal to or greater than 30 percent.
	c. The average PM emissions must not exceed 1.4 kg/Mg (3.1 lb/hr).	i. The 3-hour block average PM emissions measured during the performance test using one of the methods specified in item 21 of Table 4 to this subpart is equal to or less than 1.4 kg/Mg (3.1 lb/hr).
	d. The average Hg emissions must not exceed 6.1 μg/dscm at 18 percent oxygen.	i. The 3-hour block average Hg emissions measured during the performance test using one of the methods specified in item 22 of Table 4 to this subpart is equal to or less than 6.1 μg/dscm at 18 percent oxygen.
10. Each new batch process kiln that is used to process clay refractory products.	a. The average uncontrolled HF emissions must be reduced by at least 90 percent.	The 2-run block average HF emission reduction measured during the performance test is equal to or greater than 90 percent.
	b. The average uncontrolled HCl emissions must be reduced by at least 30 percent.	The 2-run block average HCl emissions reduction measured during the performance test is equal to or greater than 30 percent.
	c. The average PM emissions must not exceed 1.4 kg/Mg (3.1 lb/hr).	i. The 2-run block average PM emissions measured during the performance test using one of the methods specified in item 21 of Table 4 to this subpart is equal to or less than 1.4 kg/Mg (3.1 lb/hr).
	d. The average Hg emissions must not exceed 6.1 μg/dscm at 18 percent oxygen.	i. The 2-run block average Hg emissions measured during the performance test using one of the methods specified in item 22 of Table 4 to this subpart is equal to or less than 6.1 μg/dscm at 18 percent oxygen.
11. Each existing continuous kiln that is used to produce clay refractory products on and after November 20, 2022.	a. The average PM emissions must not exceed 4.3 kg/Mg (9.5 lb/hr).	i. The 3-hour block average PM emissions measured during the performance test using one of the methods specified in item 21 of Table 4 to this subpart is equal to or less than 4.3 kg/Mg (9.5 lb/hr).

For . . .	For the following emission limit . . .	You have demonstrated compliance if . . .
	b. The average Hg emissions must not exceed 18 μg/dscm at 18 percent oxygen.	i. The 3-hour block average Hg emissions measured during the performance test using one of the methods specified in item 22 of Table 4 to this subpart is equal to or less than 18 μg/dscm at 18 percent oxygen.
12. Each existing batch kiln that is used to produce clay refractory products on and after November 20, 2022.	a. The average PM emissions must not exceed 4.3 kg/Mg (9.5 lb/hr).	i. The 2-run block average PM emissions measured during the performance test using one of the methods specified in item 21 of Table 4 to this subpart is equal to or less than 4.3 kg/Mg (9.5 lb/hr).
	b. The average Hg emissions must not exceed 18 μg/dscm at 18 percent oxygen.	i. The 2-run block average Hg emissions measured during the performance test using one of the methods specified in item 22 of Table 4 to this subpart is equal to or less than 18 μg/dscm at 18 percent oxygen.

■ 22. Table 6 to Subpart SSSSS is revised to read as follows:

Table 6 to Subpart SSSSS of Part 63—Initial Compliance With Work Practice Standards

As stated in § 63.9806, you must show initial compliance with the work practice standards for affected sources according to the following table:

For each . . .	For the following standard . . .	You have demonstrated initial compliance if . . .
1. Each affected source listed in Table 3 to this subpart.	a. Each applicable work practice standard listed in Table 3 to this subpart.	i. You have selected a method for performing each of the applicable work practice standards listed in Table 3 to this subpart; and ii. You have included in your Initial Notification a description of the method selected for complying with each applicable work practice standard, as required by § 63.9(b); and iii. You submit a signed statement with the Notification of Compliance Status that you have implemented the applicable work practice standard listed in Table 3 to this subpart; and iv. You have described in your OM&M plan the method for complying with each applicable work practice standard specified in Table 3 to this subpart.
2. Each basket or container that is used for holding fired refractory shapes in an existing shape preheater and autoclave during the pitch impregnation process.	a. Control POM emissions from any affected shape preheater.	i. You have implemented at least one of the work practice standards listed in item 1 of Table 3 to this subpart; and ii. You have established a system for recording the date and cleaning method for each time you clean an affected basket or container.
3. Each affected new or existing pitch working tank.	Control POM emissions	You have captured and vented emissions from the affected pitch working tank to the device that is used to control emissions from an affected defumer or coking oven, or to a thermal or catalytic oxidizer that is comparable to the control device used on an affected defumer or coking oven.
4. Each new or existing chromium refractory products kiln.	Minimize fuel-based HAP emissions.	You use natural gas, or equivalent, as the kiln fuel.
5. Each existing clay refractory products kiln.	Minimize fuel-based HAP emissions.	You use natural gas, or equivalent, as the kiln fuel.
6. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP, on and after November 19, 2021.	Minimize fuel-based HAP emissions.	You use natural gas, or equivalent, as the kiln fuel.

■ 23. Table 7 to Subpart SSSSS is revised to read as follows:

Table 7 to Subpart SSSSS of Part 63—Continuous Compliance With Emission Limits

As stated in § 63.9810, you must show continuous compliance with the emission limits for affected sources according to the following table:

For . . .	For the following emission limit . . .	You must demonstrate continuous compliance by . . .
1. Each affected source listed in Table 1 to this subpart.	a. Each applicable emission limit listed in Table 1 to this subpart.	i. Collecting and recording the monitoring and process data listed in Table 2 (operating limits) to this subpart; and ii. Reducing the monitoring and process data associated with the operating limits specified in Table 2 to this subpart; and iii. Recording the results of any control device inspections; and

For . . .	For the following emission limit . . .	You must demonstrate continuous compliance by . . .
		iv. Reporting, in accordance with § 63.9814(e), any deviation from the applicable operating limits specified in Table 2 to this subpart.
2. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP; each new or existing coking oven and defumer that is used to produce pitch-impregnated refractory products; each new shape preheater that is used to produce pitch-impregnated refractory products; AND each new or existing process unit that is exhausted to a thermal or catalytic oxidizer that also controls emissions from an affected shape preheater or pitch working tank.	As specified in items 3 through 7 of this table.	Satisfying the applicable requirements specified in items 3 through 7 of this table.
3. Each affected process unit that is equipped with a thermal or catalytic oxidizer.	a. The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen; OR the average THC percentage reduction must equal or exceed 95 percent.	i. Collecting the applicable data measured by the control device temperature monitoring system, as specified in items 5, 6, 8, and 9 of Table 8 to this subpart; and ii. Reducing the applicable data measured by the control device temperature monitoring system, as specified in items 5, 6, 8, and 9 of Table 8 to this subpart; and iii. Maintaining the average control device operating temperature for the applicable averaging period specified in items 5, 6, 8, and 9 of Table 2 to this subpart at or above the minimum allowable operating temperature established during the most recent performance test.
4. Each affected process unit that is equipped with a control device other than a thermal or catalytic oxidizer.	The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen; OR the average THC performance reduction must equal or exceed 95 percent.	Operating and maintaining a THC CEMS at the outlet of the control device or in the stack of the affected source, according to the requirements of Procedure 1 of 40 CFR part 60, appendix F.
5. Each affected process unit that uses process changes to meet the applicable emission limit.	The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen.	Operating and maintaining a THC CEMS at the outlet of the control device or in the stack of the affected source, according to the requirements of Procedure 1 of 40 CFR part 60, appendix F.
6. Each affected continuous process unit.	The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen; OR the average THC percentage reduction must equal or exceed 95 percent.	Recording the organic HAP processing rate (pounds per hour) and the operating temperature of the affected source, as specified in items 3.b. and 3.c. of Table 4 to this subpart.
7. Each affected batch process unit	The average THC concentration must not exceed 20 ppmvd, corrected to 18 percent oxygen; OR the average THC percentage reduction must equal or exceed 95 percent.	Recording the organic HAP processing rate (pounds per batch); and process cycle time for each batch cycle; and hourly average operating temperature of the affected source, as specified in items 8.b. through 8.d. of Table 4 to this subpart.
8. Each new kiln that is used to process clay refractory products.	As specified in items 9 through 11 of this table.	Satisfying the applicable requirements specified in items 9 through 11 of this table.
9. Each new affected kiln that is equipped with a DLA.	a. The average HF emissions must not exceed 0.019 kg/Mg (0.038 lb/ton) of uncalcined clay processed, OR the average uncontrolled HF emissions must be reduced by at least 90 percent; and b. The average HCl emissions must not exceed 0.091 kg/Mg (0.18 lb/ton) of uncalcined clay processed, or the average uncontrolled HCl emissions must be reduced by at least 30 percent.	i. Maintaining the pressure drop across the DLA at or above the minimum levels established during the most recent performance test; and ii. Verifying that the limestone hopper contains an adequate amount of free-flowing limestone by performing a daily visual check of the limestone in the feed hopper; and iii. Recording the limestone feeder setting daily to verify that the feeder setting is at or above the level established during the most recent performance test; and iv. Using the same grade of limestone as was used during the most recent performance test and maintaining records of the source and grade of limestone.

For . . .	For the following emission limit . . .	You must demonstrate continuous compliance by . . .
	c. The average PM emissions must not exceed 1.4 kg/Mg (3.1 lb/hr); and d. The average Hg emissions must not exceed 6.1 μg/dscm, corrected to 18 percent oxygen.	i. Performing VE observations of the stack at the frequency specified in § 63.9810(f) using EPA Method 22 of 40 CFR part 60, appendix A–7; maintaining no VE from the stack.
10. Each new affected kiln that is equipped with a DIFF or DLS/FF.	a. The average HF emissions must not exceed 0.019 kg/Mg (0.038 lb/ton) of uncalcined clay processed; OR the average uncontrolled HF emissions must be reduced by at least 90 percent; and b. The average HCl emissions must not exceed 0.091 kg/Mg (0.18 lb/ton) of uncalcined clay processed; OR the average uncontrolled HCl emissions must be reduced by at least 30 percent; and c. The average PM emissions must not exceed 1.4 kg/Mg (3.1 lb/hr); and d. The average Hg emissions must not exceed 6.1 μg/dscm, corrected to 18 percent oxygen.	i. Verifying at least once each 8-hour shift that lime is free-flowing by means of a visual check, checking the output of a load cell, carrier gas/lime flow indicator, or carrier gas pressure drop measurement system; and ii. Recording feeder setting daily to verify that the feeder setting is at or above the level established during the most recent performance test; and iii. Initiating corrective action within 1 hour of a bag leak detection system alarm AND completing corrective actions in accordance with the OM&M plan, AND operating and maintaining the fabric filter such that the alarm does not engage for more than 5 percent of the total operating time in a 6-month block reporting period.
11. Each new affected kiln that is equipped with a wet scrubber.	a. The average HF emissions must not exceed 0.019 kg/Mg (0.038 lb/ton) of uncalcined clay processed; OR the average uncontrolled HF emissions must be reduced by at least 90 percent; and b. The average HCl emissions must not exceed 0.091 kg/Mg (0.18 lb/ton) of uncalcined clay processed; OR the average uncontrolled HCl emissions must be reduced by at least 30 percent; and c. The average PM emissions must not exceed 1.4 kg/Mg (3.1 lb/hr); and d. The average Hg emissions must not exceed 6.1 μg/dscm, corrected to 18 percent oxygen.	i. Maintaining the pressure drop across the scrubber, liquid pH, and liquid flow rate at or above the minimum levels established during the most recent performance test; and ii. If chemicals are added to the scrubber liquid, maintaining the average chemical feed rate at or above the minimum chemical feed rate established during the most recent performance test.
12. Each new affected kiln that is equipped with an activated carbon injection system.	The average Hg emissions must not exceed 6.1 μg/dscm, corrected to 18 percent oxygen.	Collecting the carbon flow rate data according to § 63.9804(a); reducing the carbon flow rate data to 3-hour block averages according to § 63.9804(a); maintaining the average carbon flow rate for each 3-hour block period at or above the average carbon flow rate established during the Hg performance test in which compliance was demonstrated.
13. Each existing affected kiln that is equipped with a DLA or no add-on control.	a. The average PM emissions must not exceed 4.3 kg/Mg (9.5 lb/hr); and. b. The average Hg emissions must not exceed 18 μg/dscm, corrected to 18 percent oxygen.	i. Performing VE observations of the stack at the frequency specified in § 63.9810(f) using EPA Method 22 of 40 CFR part 60, appendix A–7; maintaining no VE from the stack.
14. Each existing affected kiln that is equipped with a DIFF or DLS/FF.	a. The average PM emissions must not exceed 4.3 kg/Mg (9.5 lb/hr).	i. If you use a bag leak detection system, as prescribed in § 63.9804(f), initiating corrective action within 1 hour of a bag leak detection system alarm AND completing corrective actions in accordance with the OM&M plan, AND operating and maintaining the fabric filter such that the alarm does not engage for more than 5 percent of the total operating time in a 6-month block reporting period; OR ii. Performing VE observations of the stack at the frequency specified in § 63.9810(f) using EPA Method 22 of 40 CFR part 60, appendix A–7; maintaining no VE from the stack.

For . . .	For the following emission limit . . .	You must demonstrate continuous compliance by . . .
15. Each existing affected kiln that is equipped with a wet scrubber.	a. The average PM emissions must not exceed 4.3 kg/Mg (9.5 lb/hr); and b. The average Hg emissions must not exceed 18 μg/dscm, corrected to 18 percent oxygen.	i. Maintaining the pressure drop across the scrubber and liquid flow rate at or above the minimum levels established during the most recent performance test.
16. Each existing affected kiln that is equipped with an activated carbon injection system.	The average Hg emissions must not exceed 18 μg/dscm, corrected to 18 percent oxygen.	Collecting the carbon flow rate data according to § 63.9804(a); reducing the carbon flow rate data to 3-hour block averages according to § 63.9804(a); maintaining the average carbon flow rate for each 3-hour block period at or above the average carbon flow rate established during the Hg performance test in which compliance was demonstrated.

■ 24. Table 8 to Subpart SSSSS is revised to read as follows:

Table 8 to Subpart SSSSS of Part 63—Continuous Compliance With Operating Limits

As stated in § 63.9810, you must show continuous compliance with the operating limits for affected sources according to the following table:

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
1. Each affected source listed in Table 2 to this subpart.	a. Each applicable operating limit listed in Table 2 to this subpart.	i. Maintaining all applicable process and control device operating parameters within the limits established during the most recent performance test; and ii. Conducting annually an inspection of all duct work, vents, and capture devices to verify that no leaks exist and that the capture device is operating such that all emissions are properly vented to the control device in accordance with the OM&M plan.
2. Each affected continuous kiln used to manufacture refractory products that use organic HAP that is equipped with a THC control device.	a. The operating limits specified in items 2.a. through 2.c. of Table 2 to this subpart.	i. Operating the control device on the affected kiln during all times except during periods of approved scheduled maintenance, as specified in § 63.9792(e); and ii. Before May 19, 2022, minimizing HAP emissions from the affected kiln during all periods of scheduled maintenance of the kiln control device when the kiln is operating and the control device is out of service; on and after May 19, 2022, minimizing HAP emissions during the period when the kiln is operating and the control device is out of service by complying with the applicable standard in Table 3 to this subpart; and iii. Minimizing the duration of all periods of scheduled maintenance of the kiln control device when the kiln is operating and the control device is out of service; on and after May 19, 2022, the total time during which the kiln is operating and the control device is out of service for the each year on a 12-month rolling basis must not exceed 750 hours.
3. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP; each new or existing coking oven and defumer that is used to produce pitch-impregnated refractory products; each new shape preheater that is used to produce pitch-impregnated refractory products; AND each new or existing process unit that is exhausted to a thermal or catalytic oxidizer that also controls emissions from an affected shape preheater or pitch working tank.	As specified in items 4 through 9 of this table.	Satisfying the applicable requirements specified in items 4 through 9 of this table.
4. Each affected continuous process unit.	Maintain process operating parameters within the limits established during the most recent performance test.	i. Recording the organic HAP processing rate (pounds per hour); and ii. Recording the operating temperature of the affected source at least hourly; and iii. Maintaining the 3-hour block average organic HAP processing rate at or below the maximum organic HAP processing rate established during the most recent performance test.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
5. Continuous process units that are equipped with a thermal oxidizer.	Maintain the 3-hour block average operating temperature in the thermal oxidizer combustion chamber at or above the minimum allowable operating temperature established during the most recent performance test.	i. Measuring and recording the thermal oxidizer combustion chamber temperature at least every 15 minutes; and ii. Calculating the hourly average thermal oxidizer combustion chamber temperature; and iii. Maintaining the 3-hour block average thermal oxidizer combustion chamber temperature at or above the minimum allowable operating temperature established during the most recent performance test; and iv. Reporting, in accordance with § 63.9814(e), any 3-hour block average operating temperature measurements below the minimum allowable thermal oxidizer combustion chamber operating temperature established during the most recent performance test.
6. Continuous process units that are equipped with a catalytic oxidizer.	a. Maintain the 3-hour block average temperature at the inlet of the catalyst bed at or above the minimum allowable catalyst bed inlet temperature established during the most recent performance test.	i. Measuring and recording the temperature at the inlet of the catalyst bed at least every 15 minutes; and ii. Calculating the hourly average temperature at the inlet of the catalyst bed; and iii. Maintaining the 3-hour block average temperature at the inlet of the catalyst bed at or above the minimum allowable catalyst bed inlet temperature established during the most recent performance test; and iv. Reporting, in accordance with § 63.9814(e), any 3-hour block average catalyst bed inlet temperature measurements below the minimum allowable catalyst bed inlet temperature established during the most recent performance; and v. Checking the activity level of the catalyst at least every 12 months and taking any necessary corrective action, such as replacing the catalyst, to ensure that the catalyst is performing as designed.
7. Each affected batch process unit	Maintain process operating parameters within the limits established during the most recent performance test.	i. Recording the organic HAP processing rate (pounds per batch); and ii. Recording the hourly average operating temperature of the affected source; and iii. Recording the process cycle time for each batch cycle; and iv. Maintaining the organic HAP processing rate at or below the maximum organic HAP processing rate established during the most recent performance test.
8. Batch process units that are equipped with a thermal oxidizer.	Maintain the hourly average temperature in the thermal oxidizer combustion chamber at or above the hourly average temperature established for the corresponding 1-hour period of the cycle during the most recent performance test.	i. Measuring and recording the thermal oxidizer combustion chamber temperature at least every 15 minutes; and ii. Calculating the hourly average thermal oxidizer combustion chamber temperature; and iii. From the start of each batch cycle until 3 hours have passed since the process unit reached maximum temperature, maintaining the hourly average operating temperature in the thermal oxidizer combustion chamber at or above the minimum allowable operating temperature established for the corresponding period during the most recent performance test, as determined according to item 11 of Table 4 to this subpart; and iv. For each subsequent hour of the batch cycle, maintaining the hourly average operating temperature in the thermal oxidizer combustion chamber at or above the minimum allowable operating temperature established for the corresponding hour during the most recent performance test, as specified in item 13 of Table 4 to this subpart; and v. Reporting, in accordance with § 63.9814(e), any temperature measurements below the minimum allowable thermal oxidizer combustion chamber temperature measured during the most recent performance test.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
9. Batch process units that are equipped with a catalytic oxidizer.	Maintain the hourly average temperature at the inlet of the catalyst bed at or above the corresponding hourly average temperature established for the corresponding 1-hour period of the cycle during the most recent performance test.	i. Measuring and recording temperatures at the inlet of the catalyst bed at least every 15 minutes; and ii. Calculating the hourly average temperature at the inlet of the catalyst bed; and iii. From the start of each batch cycle until 3 hours have passed since the process unit reached maximum temperature, maintaining the hourly average operating temperature at the inlet of the catalyst bed at or above the minimum allowable bed inlet temperature established for the corresponding period during the most recent performance test, as determined according to item 12 of Table 4 to this subpart; and iv. For each subsequent hour of the batch cycle, maintaining the hourly average operating temperature at the inlet of the catalyst bed at or above the minimum allowable bed inlet temperature established for the corresponding hour during the most recent performance test, as specified in item 13 of Table 4 to this subpart; and v. Reporting, in accordance with § 63.9814(e), any catalyst bed inlet temperature measurements below the minimum allowable bed inlet temperature measured during the most recent performance test; and vi. Checking the activity level of the catalyst at least every 12 months and taking any necessary corrective action, such as replacing the catalyst, to ensure that the catalyst is performing as designed.
10. Each new kiln that is used to process clay refractory products.	As specified in items 11 through 13 of this table.	Satisfying the applicable requirements specified in items 11 through 13 of this table.
11. Each new kiln that is equipped a DLA.	a. Maintain the average pressure drop across the DLA for each 3-hour block period at or above the minimum pressure drop established during the most recent performance test.	i. Collecting the DLA pressure drop data, as specified in item 18.a. of Table 4 to this subpart; and ii. Reducing the DLA pressure drop data to 1-hour and 3-hour block averages; and iii. Maintaining the 3-hour block average pressure drop across the DLA at or above the minimum pressure drop established during the most recent performance test.
	b. Maintain free-flowing limestone in the feed hopper, silo, and DLA.	Verifying that the limestone hopper has an adequate amount of free-flowing limestone by performing a daily visual check of the limestone hopper.
	c. Maintain the limestone feeder setting at or above the level established during the most recent performance test.	Recording the limestone feeder setting at least daily to verify that the feeder setting is being maintained at or above the level established during the most recent performance test.
	d. Use the same grade of limestone from the same source as was used during the most recent performance test.	Using the same grade of limestone as was used during the most recent performance test and maintaining records of the source and grade of limestone.
	e. Maintain no VE from the stack ..	i. Performing VE observations of the stack at the frequency specified in § 63.9810(f) using EPA Method 22 of 40 CFR part 60, appendix A–7; and ii. Maintaining no VE from the stack.
12. Each new kiln that is equipped with a DIFF or DLS/FF.	a. Initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with the OM&M plan; AND operate and maintain the fabric filter such that the alarm does not engage for more than 5 percent of the total operating time in a 6-month block reporting period.	i. Initiating corrective action within 1 hour of a bag leak detection system alarm and completing corrective actions in accordance with the OM&M plan; and ≤ii. Operating and maintaining the fabric filter such that the alarm does not engage for more than 5 percent of the total operating time in a 6-month block reporting period; in calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted; if corrective action is required, each alarm shall be counted as a minimum of 1 hour; if you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by you to initiate corrective action.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
	b. Maintain free-flowing lime in the feed hopper or silo at all times for continuous injection systems; AND maintain feeder setting at or above the level established during the most recent performance test for continuous injection systems.	i. Verifying at least once each 8-hour shift that lime is free-flowing via a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system, or other system; recording all monitor or sensor output, and if lime is found not to be free flowing, promptly initiating and completing corrective actions; and ii. Recording the feeder setting once each day of operation to verify that the feeder setting is being maintained at or above the level established during the most recent performance test.
13. Each new kiln that is used to process clay refractory products and is equipped with a wet scrubber.	a. Maintain the average pressure drop across the scrubber for each 3-hour block period at or above the minimum pressure drop established during the most recent performance test.	i. Collecting the scrubber pressure drop data, as specified in item 20.a. of Table 4 to this subpart; and ii. Reducing the scrubber pressure drop data to 1-hour and 3-hour block averages; and iii. Maintaining the 3-hour block average scrubber pressure drop at or above the minimum pressure drop established during the most recent performance test.
	b. Maintain the average scrubber liquid pH for each 3-hour block period at or above the minimum scrubber liquid pH established during the most recent performance test.	i. Collecting the scrubber liquid pH data, as specified in item 20.b. of Table 4 to this subpart; and ii. Reducing the scrubber liquid pH data to 1-hour and 3-hour block averages; and iii. Maintaining the 3-hour block average scrubber liquid pH at or above the minimum scrubber liquid pH established during the most recent performance test.
	c. Maintain the average scrubber liquid flow rate for each 3-hour block period at or above the minimum scrubber liquid flow rate established during the most recent performance test.	i. Collecting the scrubber liquid flow rate data, as specified in item 20.c. of Table 4 to this subpart; and ii. Reducing the scrubber liquid flow rate data to 1-hour and 3-hour block averages; and iii. Maintaining the 3-hour block average scrubber liquid flow rate at or above the minimum scrubber liquid flow rate established during the most recent performance test.
	d. If chemicals are added to the scrubber liquid, maintain the average scrubber chemical feed rate for each 3-hour block period at or above the minimum scrubber chemical feed rate established during the most recent performance test.	i. Collecting the scrubber chemical feed rate data, as specified in item 20.d. of Table 4 to this subpart; and ii. Reducing the scrubber chemical feed rate data to 1-hour and 3-hour block averages; and iii. Maintaining the 3-hour block average scrubber chemical feed rate at or above the minimum scrubber chemical feed rate established during the most recent performance test.
14. Each new and existing affected kiln that is equipped with an activated carbon injection system.	a. Maintain the average carbon flow rate for each 3-hour block period at or above the average carbon flow rate established during the Hg performance test in which compliance was demonstrated.	i. Collecting the carbon flow rate data, as specified in item 23 of Table 4 to this subpart; and ii. Reducing the carbon flow rate data to 3-hour block averages; and iii. Maintaining the average carbon flow rate for each 3-hour block period at or above the average carbon flow rate established during the Hg performance test in which compliance was demonstrated.
15. Each existing affected kiln that is equipped with a DLA or no add-on control.	a. Maintain no VE from the stack ..	i. Performing VE observations of the stack at the frequency specified in § 63.9810(f) using EPA Method 22 of 40 CFR part 60, appendix A–7; and ii. Maintaining no VE from the stack.
16. Each existing affected kiln that is equipped with a FF.	a. Maintain no VE from the stack; OR.	i. Performing VE observations of the stack at the frequency specified in § 63.9810(f) using EPA Method 22 of 40 CFR part 60, appendix A–7; and ii. Maintaining no VE from the stack.

For . . .	For the following operating limit . . .	You must demonstrate continuous compliance by . . .
	b. Initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with the OM&M plan; AND operate and maintain the fabric filter such that the alarm does not engage for more than 5 percent of the total operating time in a 6-month block reporting period.	i. Initiating corrective action within 1 hour of a bag leak detection system alarm and completing corrective actions in accordance with the OM&M plan; and ii. Operating and maintaining the fabric filter such that the alarm does not engage for more than 5 percent of the total operating time in a 6-month block reporting period; in calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted; if corrective action is required, each alarm shall be counted as a minimum of 1 hour; if you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken by you to initiate corrective action.
17. Each existing affected kiln that is equipped with a wet scrubber.	a. Maintain the average pressure drop across the scrubber for each 3-hour block period at or above the minimum pressure drop established during the most recent performance test.	i. Collecting the scrubber pressure drop data, as specified in item 25.a of Table 4 to this subpart; and ii. Reducing the scrubber pressure drop data to 1-hour and 3-hour block averages; and iii. Maintaining the 3-hour block average scrubber pressure drop at or above the minimum pressure drop established during the most recent performance test.
	b. Maintain the average scrubber liquid flow rate for each 3-hour block period at or above the minimum scrubber liquid flow rate established during the most recent performance test.	i. Collecting the scrubber liquid flow rate data, as specified in item 25.b. of Table 4 to this subpart; and ii. Reducing the scrubber liquid flow rate data to 1-hour and 3-hour block averages; and iii. Maintaining the 3-hour block average scrubber liquid flow rate at or above the minimum scrubber liquid flow rate established during the most recent performance test.

■ 25. Table 9 to Subpart SSSSS is revised to read as follows:

Table 9 to Subpart SSSSS of Part 63—Continuous Compliance With Work Practice Standards

As stated in § 63.9810, you must show continuous compliance with the work practice standards for affected sources according to the following table:

For . . .	For the following work practice standard . . .	You must demonstrate continuous compliance by . . .
1. Each affected source listed in Table 3 to this subpart.	Each applicable work practice requirement listed in Table 3 to this subpart.	i. Performing each applicable work practice standard listed in Table 3 to this subpart; and ii. Maintaining records that document the method and frequency for complying with each applicable work practice standard listed in Table 3 to this subpart, as required by §§ 63.10(b) and 63.9816(c)(2).
2. Each basket or container that is used for holding fired refractory shapes in an existing shape preheater and autoclave during the pitch impregnation process.	Control POM emissions from any affected shape preheater.	i. Controlling emissions from the volatilization of residual pitch by implementing one of the work practice standards listed in item 1 of Table 3 to this subpart; and ii. Recording the date and cleaning method each time you clean an affected basket or container.
3. Each new or existing pitch working tank.	Control POM emissions	Capturing and venting emissions from the affected pitch working tank to the control device that is used to control emissions from an affected defumer or coking oven, or to a thermal or catalytic oxidizer that is comparable to the control device used on an affected defumer or coking oven.
4. Each new or existing chromium refractory products kiln.	Minimize fuel-based HAP emissions.	i. Before November 19, 2021, using natural gas, or equivalent, as the kiln fuel at all times except during periods of natural gas curtailment or supply interruption; on and after November 19, 2021, using natural gas, or equivalent, as the kiln fuel at all times; and ii. Before November 19, 2021, if you intend to use an alternative fuel, submitting a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in § 63.9824; and iii. Before November 19, 2021, submitting a report of alternative fuel use within 10 working days after terminating the use of the alternative fuel, as specified in § 63.9814(g).

For . . .	For the following work practice standard . . .	You must demonstrate continuous compliance by . . .
5. Each existing clay refractory products kiln.	Minimize fuel-based HAP emissions.	i. Before November 19, 2021, using natural gas, or equivalent, as the kiln fuel at all times except during periods of natural gas curtailment or supply interruption; on and after November 19, 2021, using natural gas, or equivalent, as the kiln fuel at all times; and ii. Before November 19, 2021, if you intend to use an alternative fuel, submitting a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in § 63.9824; and iii. Before November 19, 2021, submitting a report of alternative fuel use within 10 working days after terminating the use of the alternative fuel, as specified in § 63.9814(g).
6. Each affected continuous kiln used to manufacture refractory products that use organic HAP that is equipped with an emission control device for THC.	Minimize organic HAP emissions ..	i. Operating the control device at all times unless you receive Administrator approval to take the control device out of service for scheduled maintenance, as specified in § 63.9792(e); and ii. Minimizing HAP emissions during the period when the kiln is operating and the control device is out of service as specified in item 5 of Table 3 to this subpart; and iii. On and after November 19, 2021, recording the actual hourly organic HAP processing rate for the kiln while the control device was out of service and the amount of product manufactured in the kiln while the control device was out of service; and iv. Recording the duration of each period when the kiln is operating and the control device is out of service and, on and after November 19, 2021, the total amount of time per year on a 12-month rolling basis that the kiln has operated and the control device has been out of service.
7. Each new or existing curing oven, shape dryer, and kiln that is used to process refractory products that use organic HAP, on and after November 19, 2021.	Minimize fuel-based HAP emissions.	Using natural gas, or equivalent, as the kiln fuel at all times.

■ 26. Table 10 to Subpart SSSSS is revised to read as follows:

Table 10 to Subpart SSSSS of Part 63—Requirements for Reports

As stated in § 63.9814, you must comply with the requirements for reports in the following table:

You must submit a(n) . . .	The report must contain . . .	You must submit the report . . .
1. Compliance report	The information in § 63.9814(c) through (f).	Semiannually according to the requirements in § 63.9814(a) through (f).
2. Before May 19, 2022, immediate SSM report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your SSMP, on and after May 19, 2022, immediate SSM report is not required.	a. Actions taken for the event	By fax or telephone within 2 working days after starting actions inconsistent with the plan.
	b. The information in § 63.10(d)(5)(ii).	By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority.
3. Before May 19, 2022, report of alternative fuel use.	The information in § 63.9814(g) and items 4 and 5 of Table 9 to this subpart.	If you are subject to the work practice standard specified in item 3 or 4 of Table 3 to this subpart, and you use an alternative fuel in the affected kiln, by letter within 10 working days after terminating the use of the alternative fuel.
4. Performance test report	The information in § 63.7(g)	According to the requirements of § 63.9814(h).
5. CMS performance evaluation, as required for CEMS.	The information in § 63.7(g)	According to the requirements of § 63.9814(i).

■ 27. Table 11 to Subpart SSSSS is revised to read as follows:

Table 11 to Subpart SSSSS of Part 63—Applicability of General Provisions to Subpart SSSSS

As stated in § 63.9820, you must comply with the applicable General Provisions requirements according to the following table:

Citation	Subject	Brief description	Applies to subpart SSSSS
§ 63.1	Applicability		Yes.
§ 63.2	Definitions		Yes.
§ 63.3	Units and Abbreviations		Yes.
§ 63.4	Prohibited Activities	Compliance date; circumvention, severability	Yes.
§ 63.5	Construction/Reconstruction.	Applicability; applications; approvals	Yes.
§ 63.6(a)	Applicability	General Provisions (GP) apply unless compliance extension; GP apply to area sources that become major.	Yes.
§ 63.6(b)(1)–(4)	Compliance Dates for New and Reconstructed Sources.	Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for section 112(f).	Yes.
§ 63.6(b)(5)	Notification		Yes.
§ 63.6(b)(6)	[Reserved].		
§ 63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That Become Major.	Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were area sources.	Yes.
§ 63.6(c)(1)–(2)	Compliance Dates for Existing Sources.	Comply according to date in subpart, which must be no later than 3 years after effective date; for section 112(f) standards, comply within 90 days of effective date unless compliance extension.	Yes.
§ 63.6(c)(3)–(4)	[Reserved].		
§ 63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major.	Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years).	Yes.
§ 63.6(d)	[Reserved].		
§ 63.6(e)(1)–(2)	Operation & Maintenance	Operate to minimize emissions at all times; correct malfunctions as soon as practicable; requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met; see § 63.9792(b) for general duty requirement..	Yes before May 19, 2022. No on and after May 19, 2022.
§ 63.6(e)(3)	SSMP requirements		Yes before May 19, 2022. No on and after May 19, 2022.
§ 63.6(f)(1)	Compliance Except During SSM.	You must comply with emission standards at all times except during SSM.	No.
§ 63.6(f)(2)–(3)	Methods for Determining Compliance.	Compliance based on performance test, operation and maintenance plans, records, inspection.	Yes.
§ 63.6(g)(1)–(3)	Alternative Standard	Procedures for getting an alternative standard.	Yes.
§ 63.6(h)(1)–(9)	Opacity/Visible Emission (VE) Standards.		Not applicable.
§ 63.6(i)(1)–(14)	Compliance Extension	Procedures and criteria for Administrator to grant compliance extension.	Yes.
§ 63.6(j)	Presidential Compliance Exemption.	President may exempt source category	Yes.
§ 63.7(a)(1)–(2)	Performance Test Dates	Dates for conducting initial performance testing and other compliance demonstrations; must conduct 180 days after first subject to rule.	Yes.
§ 63.7(a)(3)	Section 114 Authority	Administrator may require a performance test under CAA section 114 at any time.	Yes.
§ 63.7(b)(1)	Notification of Performance Test.	Must notify Administrator 60 days before the test	Yes.
§ 63.7(b)(2)	Notification of Rescheduling.	Must notify Administrator 5 days before scheduled date and provide rescheduled date.	Yes.
§ 63.7(c)	Quality Assurance/Test Plan.	Requirements; test plan approval procedures; performance audit requirements; internal and external QA procedures for testing.	Yes.
§ 63.7(d)	Testing Facilities		Yes.
§ 63.7(e)(1)	Conditions for Conducting Performance Tests.	See § 63.9800.	No, § 63.9800 specifies requirements.
§ 63.7(e)(2)	Conditions for Conducting Performance Tests.	Must conduct according to subpart and EPA test methods unless Administrator approves alternative.	Yes.
§ 63.7(e)(3)	Test Run Duration	Must have three test runs of at least 1 hour each; compliance is based on arithmetic mean of three runs; conditions when data from an additional test run can be used.	Yes; Yes, except where specified in § 63.9800 for batch process sources; Yes.
§ 63.7(f)	Alternative Test Method		Yes.
§ 63.7(g)	Performance Test Data Analysis.		Yes, except this subpart specifies how and when the performance test and performance evaluation results are reported.

Citation	Subject	Brief description	Applies to subpart SSSSS
§ 63.7(h)	Waiver of Test		Yes.
§ 63.8(a)(1)	Applicability of Monitoring Requirements.		Yes.
§ 63.8(a)(2)	Performance Specifications	Performance Specifications in appendix B of 40 CFR part 60 apply.	Yes.
§ 63.8(a)(3)	[Reserved].		
§ 63.8(a)(4)	Monitoring with Flares		Not applicable.
§ 63.8(b)(1)	Monitoring	Must conduct monitoring according to standard unless Administrator approves alternative.	Yes.
§ 63.8(b)(2)–(3)	Multiple Effluents and Multiple Monitoring Systems.	Specific requirements for installing and reporting on monitoring systems.	Yes.
§ 63.8(c)(1)	Continuous Monitoring System Operation and Maintenance.	Maintenance consistent with good air pollution control practices.	Yes before May 19, 2022. No on and after May 19, 2022.
§ 63.8(c)(2)–(3)	Monitoring System Installation.	Must install to get representative emission and parameter measurements.	Yes.
§ 63.8(c)(4)	CMS Requirements		No, § 63.9808 specifies requirements.
§ 63.8(c)(5)	COMS Minimum Procedures.		Not applicable.
§ 63.8(c)(6)	CMS Requirements		Applies only to sources required to install and operate a THC CEMS.
§ 63.8(c)(7)(i)(A)	CMS Requirements		Applies only to sources required to install and operate a THC CEMS.
§ 63.8(c)(7)(i)(B)	CMS Requirements		Applies only to sources required to install and operate a THC CEMS.
§ 63.8(c)(7)(i)(C)	CMS Requirements		Not applicable.
§ 63.8(c)(7)(ii)	CMS Requirements	Corrective action required when CMS is out of control	Yes.
§ 63.8(c)(8)	CMS Requirements		Yes.
§ 63.8(d)(1) and (2)	CMS Quality Control		Yes.
§ 63.8(d)(3)	Written procedures for CMS.		No, § 63.9794(a)(8) specifies requirements.
§ 63.8(e)	CMS Performance Evaluation.		Applies only to sources required to install and operate a THC CEMS, except this subpart specifies how and when the performance evaluation results are reported.
§ 63.8(f)(1)–(5)	Alternative Monitoring Method.		Yes.
§ 63.8(f)(6)	Alternative to Relative Accuracy Test.		Yes.
§ 63.8(g)	Data Reduction		Applies only to sources required to install and operate a THC CEMS.
§ 63.9(a)	Notification Requirements		Yes.
§ 63.9(b)(1)–(5)	Initial Notifications		Yes.
§ 63.9(c)	Request for Compliance Extension.		Yes.
§ 63.9(d)	Notification of Special Compliance Requirements for New Source.		Yes.
§ 63.9(e)	Notification of Performance Test.	Notify Administrator 60 days prior	Yes.
§ 63.9(f)	Notification of VE/Opacity Test.		Not applicable.
§ 63.9(g)	Additional Notifications When Using CMS.		Applies only to sources required to install and operate a THC CEMS.
§ 63.9(h)	Notification of Compliance Status.		Yes.
§ 63.9(i)	Adjustment of Submittal Deadlines.		Yes.
§ 63.9(j)	Change in Previous Information.		Yes.
§ 63.9(k)	Notifications	Electronic reporting procedures	Yes, only as specified in § 63.9(j).
§ 63.10(a)	Recordkeeping/Reporting		Yes.
§ 63.10(b)(1)	General Recordkeeping Requirements.		Yes.

Citation	Subject	Brief description	Applies to subpart SSSSS
§ 63.10(b)(2)(i)–(ii)	Recordkeeping of Occurrence and Duration of Startups and Shutdowns and Failures to Meet Standards.	See § 63.9816	Yes before May 19, 2022. No on and after May 19, 2022.
§ 63.10(b)(2)(iii)	Recordkeeping Relevant to Maintenance of Air Pollution Control and Monitoring Equipment.		Yes.
§ 63.10(b)(2)(iv)–(v)	Actions Taken to Minimize Emissions during SSM.		Yes before May 19, 2022. No on and after May 19, 2022.
§ 63.10(b)(2)(vi)	Recordkeeping for CMS Malfunctions.	See § 63.9816(c)(5)	Yes before May 19, 2022. No on and after May 19, 2022.
§ 63.10(b)(2)(vii)–(xi)	Records	Measurements to demonstrate compliance with emission limitations; performance test, performance evaluation, and visible emission observation results; measurements to determine conditions of performance tests and performance evaluations.	Yes.
§ 63.10(b)(2)(xii)	Records	Records when under waiver	Yes.
§ 63.10(b)(2)(xiii)	Records	Records when using alternative to relative accuracy test.	Not applicable.
§ 63.10(b)(2)(xiv)	Records	All documentation supporting Initial Notification and Notification of Compliance Status.	Yes.
§ 63.10(b)(3)	Records	Applicability Determinations	Yes.
§ 63.10(c)(1), (c)(5)–(6)	Additional Records for CMS.		Yes.
§ 63.10(c)(2)–(4)	Records	Additional Records for CMS	Not applicable.
§ 63.10(c)(7)–(8)	Records of excess emissions and parameter monitoring exceedances for CMS.	§ 63.9816 specifies requirements.	No.
§ 63.10(c)(9)	Records	Additional Records for CMS	Not applicable.
§ 63.10(c)(10)–(14)	Additional Records for CMS.		Yes.
§ 63.10(c)(15)	Records Regarding the SSMP.		Yes before May 19, 2022. No on and after May 19, 2022.
§ 63.10(d)(1)	General Reporting Requirements.	Requirements for reporting	Yes.
§ 63.10(d)(2)	Report of Performance Test Results.	When to submit to Federal or State authority	No. This subpart specifies how and when the performance test results are reported.
§ 63.10(d)(3)	Reporting Opacity or VE Observations.		Not applicable.
§ 63.10(d)(4)	Progress Reports	Must submit progress reports on schedule if under compliance extension.	Yes.
§ 63.10(d)(5)	SSM Reports	Contents and submission See § 63.9814 (d) and (e) for malfunction reporting requirements..	Yes before May 19, 2022. No on and after May 19, 2022.
§ 63.10(e)(1)–(2)	Additional CMS Reports		Applies only to sources required to install and operate a THC CEMS, except this subpart specifies how and when the performance evaluation results are reported.
§ 63.10(e)(3)	Reports		No, § 63.9814 specifies requirements.
§ 63.10(e)(4)	Reporting COMS data		Not applicable.
§ 63.10(f)	Waiver for Recordkeeping/Reporting.		Yes.
§ 63.11	Flares		Not applicable.
§ 63.12	Delegation		Yes.
§ 63.13	Addresses		Yes.
§ 63.14	Incorporation by Reference		Yes.
§ 63.15	Availability of Information and Confidentiality.		Yes.
§ 63.16	Performance Track Provisions.		Yes.

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[EPA–HQ–OAR–2020–0505, EPA–HQ–OAR–2020–0532; FRL–7523–03–OAR]

RIN 2060–AU66

National Emission Standards for Hazardous Air Pollutants: Carbon Black Production and Cyanide Chemicals Manufacturing Residual Risk and Technology Reviews, and Carbon Black Production Area Source Technology Review

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action finalizes the residual risk and technology reviews (RTR) conducted for the Carbon Black Production and Cyanide Chemicals Manufacturing major source categories, and the technology review conducted for Carbon Black Production area sources, regulated under National Emission Standards for Hazardous Air Pollutants (NESHAP). In addition, we are taking final action to add new emissions standards for the Carbon Black Production and Cyanide Chemicals Manufacturing major source categories to address hazardous air pollutant (HAP) emissions not previously covered by these NESHAP. The EPA is also finalizing amendments for both source categories that address the startup, shutdown, and malfunction (SSM) provisions of the existing standards, and require electronic reporting of certain notifications, performance test results, and semiannual reports.

DATES: These final rules are effective on November 19, 2021. The incorporation by reference (IBR) of certain publications listed in the final rule is approved by the Director of the Federal Register as of November 19, 2021.

ADDRESSES: The U.S. Environmental Protection Agency (EPA) has established a docket for the Carbon Black Production source category under Docket ID No. EPA–HQ–OAR–2020–0505, and a docket for the Cyanide Chemicals Manufacturing source category under Docket ID EPA–HQ–OAR–2020–0532. All documents in the docket are listed on the *https://www.regulations.gov/* website. 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. Publicly available docket materials are available either electronically through *https://www.regulations.gov/,* or in hard copy at the EPA Docket Center, WJC West Building, Room Number 3334, 1301 Constitution Ave. NW, Washington, DC. The Public Reading Room hours of operation are 8:30 a.m. to 4:30 p.m. Eastern Standard Time (EST), Monday through Friday. The telephone number for the Public Reading Room is (202) 566–1744, and the telephone number for the EPA Docket Center is (202) 566–1742. Hand Deliveries and couriers may be received by scheduled appointment only. For further information and updates 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 the Carbon Black Production source category final action, contact Korbin Smith, 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) 541–2416; fax number: (919) 541–4991; and email address: *smith.korbin@epa.gov.* For questions about the Cyanide Chemicals Manufacturing source category final action, contact Nathan Topham, Sector Policies and Programs Division (D243–02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–0483; fax number: (919) 541–4991; and email address: *topham.nathan@epa.gov.*

For specific information regarding the risk modeling methodology for both Carbon Black Production and Cyanide Chemicals Manufacturing, contact James Hirtz, Health and Environmental Impacts Division (C539–02), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541–0881; fax number: (919) 541–0840; and email address: *hirtz.james@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:

CAA Clean Air Act
CCD combustion control device
CCMPU cyanide chemicals manufacturing process unit
CDX Central Data Exchange
CEDRI Compliance and Emissions Data Reporting Interface
CFR Code of Federal Regulations
CO carbon monoxide
CRA Congressional Review Act
EAV equivalent annual value
EPA U.S. Environmental Protection Agency
GMACT Generic Maximum Achievable Control Technology
HAP hazardous air pollutant(s)
HCN hydrogen cyanide
HON Hazardous Organic NESHAP
HQ hazard quotient
ICBA International Carbon Black Association
ICR Information Collection Request
LEL lower explosive limit
MACT maximum achievable control technology
MUF main unit filter
NAICS North American Industry Classification System
NATA National Air Toxics Assessment
NESHAP national emission standards for hazardous air pollutants
NOCS Notification of Compliance Status
NSPS New Source Performance Standards
OAQPS Office of Air Quality Planning and Standards
OMB Office of Management and Budget
PEL permissible exposure limit
ppm parts per million
ppmv parts per million by volume
ppmw parts per million by weight
PRA Paperwork Reduction Act
PV present value
REL reference exposure level
RFA Regulatory Flexibility Act
RTR residual risk and technology review
SSM startup, shutdown, and malfunction
SSP startup and shutdown plan
STEL short term exposure limit
TOSHI target organ-specific hazard index
tpy tons per year

Background information. On January 14, 2021, the EPA proposed revisions to the Carbon Black Production NESHAP based on our RTR, and proposed no revisions to the Carbon Black Production area source rule based on our technology review. On January 15, 2021, the EPA proposed revisions to the Cyanide Chemicals Manufacturing NESHAP based on our RTR. In this action, we are finalizing decisions for, and revisions of, the NESHAP for these source categories. We summarize some of the more significant comments we timely received regarding the proposed rules and provide our responses in this preamble. A summary of all other public comments on these proposals and the EPA's responses to those comments are available in the *Summary of Comments and EPA's Responses on the National Emission Standards for Hazardous Air*