



## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Part 63**

**[EPA-HQ-OAR-2019-0373; FRL-10010-46-OAR]**

**RIN 2060-AT30**

### **National Emission Standards for Hazardous Air Pollutants: Iron and Steel Foundries**

### **Major Source Residual Risk and Technology Review and Area Source Technology Review**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** This action finalizes the residual risk and technology review (RTR) conducted for the major source Iron and Steel Foundries source category and the technology review for the area source Iron and Steel Foundries source category regulated under national emission standards for hazardous air pollutants (NESHAP). In addition, we are taking final action to remove exemptions for periods of startup, shutdown, and malfunction (SSM) and to specify that emissions standards apply at all times. These final amendments also require electronic reporting of performance test results and compliance reports and make minor corrections and clarifications to a few other rule provisions for major sources and area sources.

**DATES:** This final rule is effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. The incorporation by reference of certain publications listed in the rule is approved by the Director of the Federal Register as of January 2, 2008.

**ADDRESSES:** The U.S. Environmental Protection Agency (EPA) has established a docket for this action under Docket ID No. EPA-HQ-OAR-2019-0373. 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 electronically through <https://www.regulations.gov/>. Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room was closed to public visitors on March 31, 2020, to reduce the risk of transmitting COVID-19. Our Docket Center staff will continue to provide remote customer service via email, phone, and webform. There is a temporary suspension of mail delivery to the EPA, and no hand deliveries are currently accepted. 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 this final action, contact Phil Mulrine, 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) 541-5289; fax number: (919) 541-4991; and email address: [mulrine.phil@epa.gov](mailto:mulrine.phil@epa.gov). For specific information regarding the risk modeling methodology, contact Ted Palma, 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) 541-5470; fax number: (919) 541-0840; and email address: [palma.ted@epa.gov](mailto:palma.ted@epa.gov). For information about the applicability of the NESHAP to a particular entity, contact Maria Malave, Office of Enforcement and Compliance Assurance, U.S. Environmental Protection Agency, WJC South Building (Mail Code 2227A), 1200 Pennsylvania Ave., NW, Washington, DC 20460; telephone number: (202) 564-7027; and email address: [malave.maria@epa.gov](mailto:malave.maria@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:

ATSDR	Agency for Toxic Substances and Disease Registry
CAA	Clean Air Act
CalEPA	California EPA
CDX	Central Data Exchange
CEDRI	Compliance and Emissions Data Reporting Interface
CFR	Code of Federal Regulations
CRA	Congressional Review Act
<i>e.g.</i>	exempli gratia (for example)
EPA	Environmental Protection Agency
FQPA	Food Quality Protection Act
GACT	generally available control technology
HAP	hazardous air pollutant(s)
HQ	hazard quotient
<i>i.e.</i>	id est (that is)
IRIS	Integrated Risk Information System
km	kilometer
MACT	maximum achievable control technology
MIR	maximum individual risk
MOA	mode of action
NAICS	North American Industry Classification System
NESHAP	national emission standards for hazardous air pollutants
NTTAA	National Technology Transfer and Advancement Act
O&M	operation and maintenance
OEHHA	(California EPA) Office of Environmental Health Hazard Assessment
OMB	Office of Management and Budget
PM	particulate matter
ppmv	parts per million by volume
REL	reference exposure level
RFA	Regulatory Flexibility Act
RfC	reference concentration
RfD	reference dose
RTR	residual risk and technology review

SSM	startup, shutdown, and malfunction
TOSHI	target organ-specific hazard index
tpy	tons per year
UF	uncertainty factor
UMRA	Unfunded Mandates Reform Act
VOHAP	volatile organic hazardous air pollutant(s)

*Background information.* On October 9, 2019 (84 FR 54394), the EPA proposed decisions related to the major source Iron and Steel Foundries NESHAP based on our RTR and the area source Iron and Steel Foundries NESHAP based on our technology review. In this action, we are finalizing those decisions and other revisions to the rules. 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 the proposal and the EPA’s responses to those comments is available in the *National Emission Standards for Hazardous Air Pollutants: Iron and Steel Foundries Major Source Residual Risk and Technology Review and Area Source Technology Review – Final Rule – Summary of Public Comments and Responses*, which is available in the docket (Docket ID No. EPA-HQ-OAR-2019-0373). 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:

- I. General Information
  - A. Does this action apply to me?
  - B. Where can I get a copy of this document and other related information?
  - C. Judicial Review and Administrative Reconsideration
- II. Background
  - A. What is the statutory authority for this action?
  - B. What are the Iron and Steel Foundries source categories and how do the NESHAP regulate HAP emissions from the source categories?
  - C. What changes did we propose for the Iron and Steel Foundries source categories in our October 9, 2019, proposal?
- III. What is included in these final rules?

- A. What are the final rule amendments based on the risk review for the major source Iron and Steel Foundries source category?
- B. What are the final rule amendments based on the technology review for the Iron and Steel Foundries source categories?
- C. What are the final rule amendments addressing emissions during periods of SSM?
- D. What other changes have been made to the NESHAP?
- E. What are the effective and compliance dates of the standards?
- IV. What is the rationale for our final decisions and amendments for the Iron and Steel Foundries source categories?
  - A. Residual Risk Review for the Major Source Iron and Steel Foundries Source Category
  - B. Technology Review for the Iron and Steel Foundries Source Categories
  - C. Removal of the SSM exemptions
  - D. Electronic Reporting
  - E. Technical and Editorial Corrections
  - V. Summary of Cost, Environmental, and Economic Impacts and Additional Analyses Conducted
    - A. What are the affected sources?
    - B. What are the air quality impacts?
    - C. What are the cost impacts?
    - D. What are the economic impacts?
    - E. What are the benefits?
    - F. What analysis of environmental justice did we conduct?
    - G. What analysis of children's environmental health did we conduct?
  - VI. Statutory and Executive Order Reviews
    - A. Executive Orders 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review
    - B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs
    - C. Paperwork Reduction Act (PRA)
    - D. Regulatory Flexibility Act (RFA)
    - E. Unfunded Mandates Reform Act (UMRA)
    - F. Executive Order 13132: Federalism
    - G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
    - H. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks
    - I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use
    - J. National Technology Transfer and Advancement Act (NTTAA)
    - K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
    - L. Congressional Review Act (CRA)

## **I. General Information**

- A. *Does this action apply to me?*

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

TABLE 1. NESHAP AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS FINAL ACTION

Source Category	NESHAP	NAICS <sup>1</sup> Code
Iron and Steel Foundries	40 CFR part 63, subpart EEEEE	331511
	40 CFR part 63, subpart ZZZZZ	331512
		331513

<sup>1</sup> North American Industry Classification System.

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

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

In addition to being available in the docket, an electronic copy of this final action will also be available on the Internet. Following signature by the EPA Administrator, the EPA will post a copy of this final action at: <https://www.epa.gov/stationary-sources-air-pollution/iron-and-steel-foundries-national-emissions-standards-hazardous-air> and <https://www.epa.gov/stationary-sources-air-pollution/iron-and-steel-foundries-national-emission-standards-hazardous-air>. 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 **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider the rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. 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 hazardous air pollutants (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. All other sources are “area sources.” 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. For area sources, CAA section 112(d)(5) gives the EPA discretion to set standards based on generally available control technologies or management practices (GACT standards) in lieu of MACT standards.

In the second stage of the NESHAP 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, which is applicable to both MACT and GACT standards, 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, which is limited to the MACT standards, 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 MACT 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).<sup>1</sup> For more information on the statutory authority for this rule, see 84 FR 54394.

*B. What are the Iron and Steel Foundries source categories and how do the NESHAP regulate HAP emissions from these source categories?*

The EPA promulgated the MACT standards for major source iron and steel foundries on April 22, 2004 (69 FR 21906). The standards are codified at 40 CFR part 63, subpart EEEEE. The EPA promulgated GACT standards for area source iron and steel foundries on January 2, 2008, under 40 CFR part 63, subpart ZZZZZ (73 FR 252). Iron and steel foundries manufacture metal castings by melting iron and/or steel in a furnace, pouring the molten iron or steel into a mold of a desired shape, allowing the casting to cool (solidify) in the mold, removing the casting from the mold, and finishing (grinding and cleaning) the final cast product. There are approximately 45 major source iron and steel foundries in the United States and approximately 390 area source foundries.

The MACT standards for major source iron and steel foundries established the following: particulate matter (PM) emission limits (as a surrogate for metal HAP) and alternative metal HAP emission limits for metal melting furnaces; triethylamine emission limits from phenolic urethane cold box mold and core making operations; and organic HAP emission limits for new and existing cupola melting furnaces and scrap preheaters and for new automated cooling and shakeout lines. The MACT standards also included work practice standards prohibiting methanol to be used as a specific component of furan (also known as furfuryl alcohol) warm box mold and

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<sup>1</sup> 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.”).

core making lines and instituting scrap selection and inspection requirements to limit the amount of mercury, lead, chlorinated plastics, and free liquids present in the scrap fed to metal melting furnaces. For other ancillary sources at the foundry, such as casting finishing, the MACT standards include a building opacity limit.

The GACT standards for area source iron and steel foundries established PM emission limits (as a surrogate for metal HAP) and alternative metal HAP emission limits for metal melting furnaces at “large” foundries.<sup>2</sup> The GACT standards for metal melting furnaces at area source foundries are less stringent than the MACT standards for major source foundries and include an allowance to use emissions averaging. Small and large area source iron and steel foundries are required to operate according to scrap selection and inspection requirements to limit the amount of mercury, lead, chlorinated plastics, and free liquids present in the scrap fed to metal melting furnaces and to operate furan warm box mold and core making lines without the use of methanol as a component of the catalyst formulation.

*C. What changes did we propose for the Iron and Steel Foundries source categories in our October 9, 2019, proposal?*

On October 9, 2019, the EPA published a proposed rule in the *Federal Register* (84 FR 54394) for the Iron and Steel Foundries NESHAP for both major and area sources, 40 CFR part 63, subparts EEEEE and ZZZZZ, that took into consideration the RTR analyses for major sources and the technology review for area sources. In the proposed rule, we proposed that the health risks due to HAP emissions from major source iron and steel foundries are acceptable and

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<sup>2</sup> Existing area source foundries with annual metal melt production exceeding 20,000 tons and new area source foundries with annual metal melt capacity exceeding 10,000 tons are defined as “large” foundries; area source foundries at or below these metal melt rates are defined as “small” foundries.

that the Iron and Steel Foundries major source NESHAP (40 CFR part 63, subpart EEEEE) provides an ample margin of safety to protect public health and that additional standards are not necessary to prevent an adverse environmental effect. We also proposed that no revisions to the Iron and Steel Foundries major source or area source NESHAP are necessary based on our technology review. We proposed revisions to the SSM provisions of both NESHAP in order to ensure that they are consistent with the Court decision in *Sierra Club v. EPA*, 551 F. 3d 1019 (D.C. Cir. 2008). We proposed revisions to the recordkeeping and reporting requirements of both NESHAP to require the use of electronic reporting of performance test reports and semiannual reports. We also proposed to correct a section reference error in the major source NESHAP (40 CFR part 63, subpart EEEEE) and to correct several section reference errors and make other minor editorial revisions to the area source NESHAP (40 CFR part 63, subpart ZZZZZ). For additional information regarding the proposed rule, see the October 9, 2019, proposal (84 FR 54394).

### **III. What is included in these final rules?**

This action finalizes the EPA's determinations pursuant to the RTR provisions of CAA section 112 for the Iron and Steel Foundries major source category and the CAA technology review provisions for the Iron and Steel Foundries area source category. This action also finalizes other changes to the NESHAP, including proposed revisions to SSM requirements, electronic reporting requirements, and editorial corrections. This action also reflects several changes to the October 2019 proposal in consideration of comments received during the public comment period described in section IV of this preamble.

*A. What are the final rule amendments based on the risk review for the major source Iron and Steel Foundries source category?*

The EPA proposed no changes to Iron and Steel Foundries major source NESHAP based on the risk review conducted pursuant to CAA section 112(f). In this action, we are finalizing our proposed determination that risks from the Iron and Steel Foundries source category are acceptable, the standards provide an ample margin of safety to protect public health, and more stringent standards are not necessary to prevent an adverse environmental effect. The EPA received no new data or other information during the public comment period that causes us to change that proposed determination. Therefore, we are not making any revisions to the existing standards under CAA section 112(f), and we are readopting the existing standards. Further information regarding these decisions are provided in section IV of this preamble.

*B. What are the final rule amendments based on the technology review for the Iron and Steel Foundries source categories?*

We determined that there are no developments in practices, processes, and control technologies that necessitate revisions to the MACT or GACT standards for these source categories. Therefore, we are not finalizing revisions to the MACT or GACT standards under CAA section 112(d)(6). The analyses and rationale for these decisions are described in section IV of this preamble.

*C. What are the final rule amendments addressing emissions during periods of SSM?*

We are finalizing amendments to the major source and area source Iron and Steel Foundries NESHAP to remove and revise provisions related to SSM consistent with what we proposed (84 FR 54415) except for the volatile organic HAP (VOHAP) standards during startup and shutdown for cupola melting furnaces at major source iron and steel foundries.<sup>3</sup> With regard

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<sup>3</sup> The 20 parts per million by volume (ppmv) VOHAP emission limit for cupola melting furnaces applies only to major source iron and steel foundries (40 CFR part 63, subpart EEEEE). The area

to cupola furnaces VOHAP standards, we are removing the SSM exemptions consistent with what we proposed, however, with regard to the VOHAP emissions standards, we are finalizing work practice standards for VOHAP emissions for periods of startup and shutdown based on consideration of public comments instead of applying numeric emissions limits during these periods, as described in more detail below.

In its 2008 decision in *Sierra Club v. EPA*, 551 F.3d 1019 (DC Cir. 2008), the Court vacated portions of two provisions in the EPA's CAA section 112 regulations governing the emissions of HAP during periods of SSM. Specifically, the Court vacated the SSM exemption contained in 40 CFR 63.6(f)(1) and (h)(1), holding that under section 302(k) of the CAA, emissions standards or limitations must be continuous in nature and that the SSM exemption violates the CAA's requirement that some CAA section 112 standards apply continuously. As explained in section IV.D.1 of the October 2019 proposal preamble (84 FR 54415, October 9, 2019), the EPA proposed that the Iron and Steel Foundries NESHAP would require that the standards apply at all times, consistent with the Court decision in *Sierra Club v. EPA*, 551 F. 3d 1019 (DC Cir. 2008). Except for cupola melting furnace VOHAP emission limits, the EPA is finalizing the SSM provisions as proposed without setting a separate standard for startup and shutdown as discussed in the October 2019 proposal (84 FR 54415).

For VOHAP emissions from cupola melting furnaces, the EPA is finalizing separate standards during periods of cupola startup and shutdown to address public comments received on the proposed rule. Specifically, the EPA is finalizing amendments to the 20 ppmv VOHAP emission limit to apply only during normal production operations (*e.g.*, when furnace is actively

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source NESHAP only regulates metal HAP emissions from melting furnaces so the SSM revisions for 40 CFR part 63, subpart ZZZZZ, are being finalized as proposed without exception.

producing molten metal), or more specifically, what the major source NESHAP refers to as “on blast” conditions as defined in the rule. With regard to cupola furnace startup and shutdown periods, which are considered part of the “off blast” conditions in the major source NESHAP, the EPA is finalizing work practice standards that require compliance with the building opacity limit during initial cupola startup procedures (*e.g.*, refractory curing, cupola bed preparation, and beginning stage of cupola coke bed preparation) and final shutdown procedures (*e.g.*, cooling and cupola banking or bottom drop). For other startup, shutdown, and idling periods, the EPA is finalizing work practice standards requiring that owners/operators (1) begin operating the cupola afterburner or other thermal combustion device as soon as practicable after beginning the coke bed preparatory step but no later than 30 minutes after the blast air is started to begin the coke bed burn-in and (2) operate the afterburner or other thermal combustion device with a flame present at all times during other off blast periods. Furthermore, we are requiring facilities to operate according to procedures to minimize emissions and ensure safety during all of these periods as specified in the operation and maintenance (O&M) plan. We are finalizing new definitions of “cupola startup” and “cupola shutdown” to clarify when these work practice standards apply and adding recordkeeping requirements for facilities to demonstrate compliance with the new work practice standards. We also added monitoring and recordkeeping requirements for foundry owners or operators to demonstrate compliance with the new work practice standards. More detail regarding these revisions from the proposal are provided in section IV.C of this preamble.

Further, the EPA is not finalizing separate standards for malfunctions. We are finalizing provisions in the final rule consistent with our proposal with regard to malfunctions (see 84 FR 54415). As discussed in the October 2019 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 this action, it is unlikely that a malfunction would result in a violation of the standards, and no comments were submitted that would suggest otherwise. Refer to section IV.D.1 of the proposal preamble for further discussion of the EPA's rationale for the decision not to set separate standards for malfunctions, 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 and can accommodate those situations.

As is explained in more detail below, we are finalizing revisions to the General Provisions table to 40 CFR part 63, subparts EEEEE and ZZZZZ, to eliminate requirements that include rule language providing exemptions for periods of SSM. Additionally, we are finalizing our proposal to eliminate language related to SSM that treats periods of startup and shutdown the same as periods of malfunction, as explained further below. Finally, we are finalizing our proposal to revise the Deviation Notification Report and related records as they relate to malfunctions, as described below. As discussed in the October 2019 proposal preamble, these revisions are consistent with the requirement that the standards apply at all times. Refer to sections III.D.1 through 5 of the October 2019 proposal preamble for a detailed discussion of these amendments (see 84 FR 54415).

*D. What other changes have been made to the NESHAP?*

The EPA is requiring owners or operators of iron and steel foundries to submit electronic copies of certain required performance test reports, performance evaluation reports, and

semiannual reports through the EPA's Central Data Exchange using the Compliance and Emissions Data Reporting Interface (CEDRI). The final rule requires that performance test results and performance evaluation results be submitted using the Electronic Reporting Tool. For semiannual reports, the final rule requires that owners or operators use the appropriate spreadsheet template to submit information to CEDRI. The final version of the templates for these reports are located on the CEDRI website.<sup>4</sup>

The electronic submittal of the reports addressed in this rulemaking will increase the usefulness of the data contained in those reports, is in keeping with current trends in data availability and transparency, will further assist in the protection of public health and the environment, will improve compliance by facilitating the ability of regulated facilities to demonstrate compliance with requirements and by facilitating the ability of delegated state, local, tribal, and territorial air agencies and the EPA to assess and determine compliance, and will ultimately reduce burden on regulated facilities, delegated air agencies, and the EPA. Electronic reporting also eliminates paper-based, manual processes, thereby saving time and resources, simplifying data entry, eliminating redundancies, minimizing data reporting errors, and providing data quickly and accurately to the affected facilities, air agencies, the EPA and the public. For a more thorough discussion of electronic reporting, see the memorandum, *Electronic Reporting Requirements for New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Rules*, available in Docket ID No. EPA-HQ-OAR-2019-0373.

*E. What are the effective and compliance dates of the standards?*

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<sup>4</sup> <https://www.epa.gov/electronic-reporting-air-emissions/cedri>.

We proposed that all of the SSM revisions would become effective upon promulgation. The SSM revisions to the area source NESHAP being promulgated in this action are effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, as proposed. The SSM revisions to the General Provisions table in major source NESHAP (Table 1 to subpart EEEEE of part 63) being promulgated in this action are also effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, as proposed. However, as previously noted in section III.C of this preamble, we are finalizing new work practice standards specific to cupola startup and shutdown. Therefore, we are providing 180 days for facilities to transition to these new requirements and retaining specific provisions within the major source NESHAP at 40 CFR 63.7720 regarding SSM for this 180-day transition period. As proposed, we are also providing 180 days for facilities to transition to the electronic reporting requirements. As such, revisions for selected SSM provisions and for the electronic reporting requirements being promulgated in this action are effective on **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

#### **IV. What is the rationale for our final decisions and amendments for the Iron and Steel Foundries source categories?**

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 titled *National Emission Standards for Hazardous Air Pollutants: Iron and Steel Foundries Major Source Residual Risk and Technology Review and Area Source*

*Technology Review – Final Rule – Summary of Public Comments and Responses*, which is available in the docket (Docket ID No. EPA-HQ-OAR-2019-0373).

*A. Residual Risk Review for the Major Source Iron and Steel Foundries Source Category*

1. What did we propose pursuant to CAA section 112(f) for the major source Iron and Steel Foundries source category?

We proposed that the health risks due to emissions of HAP from the major source Iron and Steel Foundries source category are acceptable and that the NESHAP provides an ample margin of safety to protect public health and that no additional standards are necessary to prevent an adverse environmental effect.

Table 2 of this preamble provides a summary of the results of the inhalation risk assessment for the source category. More detailed information on the risk assessment can be found in the *Residual Risk Assessment for the Iron and Steel Foundries Major Source Category in Support of the 2020 Risk and Technology Review Final Rule* document, available in the docket for this action.

TABLE 2. IRON AND STEEL FOUNDRIES SOURCE CATEGORY INHALATION RISK ASSESSMENT RESULTS

Number of Facilities <sup>1</sup>	Maximum Individual Cancer Risk (in 1 million) <sup>2</sup>		Population at Increased Risk of Cancer ≥ 1-in-1 Million		Annual Cancer Incidence (cases per year)		Maximum Chronic Noncancer TOSHI <sup>3</sup>		Maximum Screening Acute Noncancer HQ <sup>4</sup>
	Actual Emissions Level	Allowable Emissions Level	Actual Emissions Level	Allowable Emissions Level	Actual Emissions Level	Allowable Emissions Level	Actual Emissions Level	Allowable Emissions Level	
46	Based on . . .		Based on . . .		Based on . . .		Based on . . .		Based on Actual Emissions Level
	50	50	144,000	144,000	0.02	0.02	0.5 (spleen)	0.5 (spleen)	
	HQ <sub>REL</sub> = 1 (arsenic)								

<sup>1</sup> Number of facilities evaluated in the risk analysis.

<sup>2</sup> Maximum individual excess lifetime cancer risk due to HAP emissions from the source category.

<sup>3</sup> Maximum target organ-specific hazard index (TOSHI). The target organ system with the highest TOSHI for the source category is respiratory. The respiratory TOSHI was calculated

using the California EPA (CalEPA) chronic reference exposure level (REL) for acrolein.

<sup>4</sup> The maximum estimated acute exposure concentration was divided by available short-term dose-response values to develop an array of hazard quotient (HQ) values. HQ values shown use the lowest available acute dose-response value, which in most cases is the REL. When an HQ exceeds 1, we also show the HQ using the next lowest available acute dose-response value.

As shown in Table 2, for the major source Iron and Steel Foundries source category, the maximum cancer risk to the individual most exposed is 50-in-1 million due to actual emissions or allowable emissions. This risk is less than 100-in-1 million, which is the presumptive upper limit of acceptable risk. The estimated incidence of cancer due to inhalation exposures for the source category is 0.02 excess cancer cases per year, or one excess case every 50 years. We estimated that approximately 144,000 people face an increased cancer risk greater than or equal to 1-in-1 million due to inhalation exposure to HAP emissions from this source category. The Agency estimated that the maximum chronic noncancer TOSHI from inhalation exposure, 0.5 (spleen), is less than 1. The screening assessment of worst-case acute inhalation impacts estimated a maximum acute HQ of 1 (due to arsenic) based on the REL.

With regard to multipathway human health risks, we estimated the maximum cancer risk for the highest exposed individual is 20-in-1 million (due to polycyclic organic matter (POM)) and the maximum noncancer chronic HQs are less than 1 for all the HAP known to be persistent and bio-accumulative in the environment (PB-HAP).

A screening-level evaluation of the potential adverse environmental risk associated with emissions of arsenic, cadmium, dioxins, hydrogen chloride, hydrogen fluoride, lead, mercury, and POM indicated that no ecological benchmarks were exceeded. Considering all the health risk information and factors discussed above, the EPA proposed that the risks are acceptable and that no additional standards are necessary to prevent an adverse environmental effect.

Under the ample margin of safety analysis, we evaluated the cost and feasibility of available control technologies and other measures that could be applied to further reduce the risks (or potential risks) due to emissions of HAP from the source category. The main control we evaluated to reduce organic HAP emissions was carbon adsorption as a possible add-on control to further reduce VOHAP and associated risks from mold- and core-making and pouring, cooling and shakeout lines at existing sources. The main control we evaluated to reduce metal HAP emissions was improved capture of fugitive PM emissions from scrap handling and melting furnaces and routing them to fabric filter control devices.

We estimated the cost of the additional controls to reduce organic HAP emissions would be \$12,700 per ton of organic HAP reduced or greater and would require a capital investment exceeding \$27 million. With regard to risk reductions, we estimated the maximum individual risk (MIR) would be reduced from 50-in-1 million to 30-in-1 million, and the number of people with risks  $\geq$  1-in-1 million would also be reduced.

We estimated the cost of the improved capture and control to reduce metal HAP emissions would be almost \$800,000 per ton metal HAP reduced and would require a capital investment of \$23 million. With regard to risk reductions, we estimated the HAP metals contribution to the MIR would be reduced from 30-in-1 million to 3-in-1 million, and the number of people with risks  $\geq$  1-in-1 million would also be reduced.

Based on consideration of the costs and cost effectiveness of both the organic HAP and metal HAP emission control systems, consideration of potential impacts to small businesses, the moderate risk reductions that would be achieved, and the uncertainties in the emissions estimates, we proposed that the Iron and Steel Foundries major source NESHAP provides an ample margin of safety to protect public health, and we did not propose any changes to the

NESHAP based on the risk review. For more details regarding the risk review, including the ample margin of safety analysis, see the proposal preamble (84 FR 54398).

2. How did the risk review change for the major source Iron and Steel Foundries source category?

The EPA has not made any changes to either the risk assessments or our determinations regarding risk acceptability, ample margin of safety, or adverse environmental effects for the major source Iron and Steel Foundries source category since the proposal was published on October 9, 2019. We are finalizing the risk review as proposed with no changes (84 FR 54394, October 9, 2019).

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

*Comment:* Several commenters agreed with the EPA's conclusion that risks from iron and steel foundry emissions are acceptable and that the current standards provide an ample margin of safety, but they suggested that the emissions data used by the EPA are outdated and flawed and that actual emissions are lower, which would result in even lower risk projections. They also stated that the costs of additional controls were significantly understated. According to the commenters, the higher cost coupled with lower emissions, which would also lower the estimated emission reductions, demonstrates that additional controls are not cost effective. On the other hand, one commenter opposed the risk conclusions stating that the EPA did not fully consider fugitive emissions.

*Response:* Regarding comments on the accuracy and completeness of the emissions and cost estimates, we used the best available emissions data in our risk assessment. We consider the emissions and release characteristics used in the risk assessment to be reasonable and appropriate for the analysis conducted. It is clear that fugitive emission sources were included as several of

these sources were driving the risk estimates for most facilities. We intentionally conducted a screening assessment of control measures using best-case (lowest cost) assumptions to determine whether, under ideal conditions, these controls might be cost effective. Based on the results of our screening analysis, we concluded that the controls were not warranted based on costs and that more detailed analyses of these control systems were not necessary (for more details see the preamble of the proposed rule, 84 FR 54412, October 9, 2019).

*Comment:* One commenter opposed the risk acceptability conclusion stating that the EPA significantly underestimated the risk because the EPA's Residual Risk Assessment failed to follow the best available science, including:

(1) underestimating health threats to children and from early-life exposure by ignoring increased risk in childhood and from prenatal exposure;

(2) underestimating health threats to communities exposed to multiple sources by refusing to add factors to account for the increased risks caused by such exposure;

(3) underestimating health threats by refusing to assess health risks at all for pollutants such as lead and refusing to assess multipathway risks for additional emitted persistent bioaccumulative pollutants such as toxic metals like chromium (VI), nickel, beryllium, antimony, and manganese; and

(4) underestimating the cancer, chronic noncancer, and acute health risks by using modeling assumptions that ignore real-world exposures, underestimating risk from chemicals such as benzene, 1,3-butadiene, nickel, manganese, and lead due to the EPA's refusal to follow the best available science and ignoring the more protective health values created by CalEPA's Office of Environmental Health Hazard Assessment (OEHHA).

*Response:* The EPA disagrees with the commenter's claim that the risk assessment for this source category does not consider the groups that may be most at risk (e.g., children and developing fetuses). When the EPA derives dose-response values for HAP, it considers the most sensitive populations identified in the available literature, and these are the values used in the Agency's risk assessments.<sup>5</sup> The EPA has an approach for selecting appropriate health benchmark values and, in general, this approach places greater weight on the EPA-derived health benchmarks than those from other agencies for the reasons explained in the document titled *Residual Risk Assessment for the Iron and Steel Foundries Major Source Category in Support of the 2020 Risk and Technology Review Final Rule*, available in the docket (Docket ID No. EPA-HQ-OAR-2019-0373). Additionally, the approach of favoring the EPA benchmarks (when they exist) has been endorsed by the Science Advisory Board (SAB) and ensures the use of values most consistent with well-established and scientifically-based EPA science policy. The EPA continually evaluates other benchmarks, including CalEPA OEHHA child-specific reference doses (RfDs) and more recent inhalation RELs<sup>6</sup> in the context of assessing risk from exposure to HAP.

With respect to cancer, the EPA uses an age-dependent adjustment factor approach referred to by the commenter but limits the application of age-dependent adjustment factors to carcinogenic pollutants that are known to act via mutagenic mode of action (MOA); in contrast,

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<sup>5</sup> U.S. EPA (2002). *A Review of the Reference Dose and Reference Concentration Processes*. U.S. Environmental Protection Agency, Risk Assessment Forum, Washington, DC. EPA/630/P-02/002F. Available online at <https://www.epa.gov/osa/review-reference-dose-and-reference-concentration-processes>.

<sup>6</sup> More recently published OEHHA RELs use a more protective set of inter-individual uncertainty factors (UFs), with a default of 30 as opposed to the EPA default of 10 with the intent of protecting for more susceptible individuals, most notably children.

the CalEPA OEHHA approach is to apply adjustment factors across the board for all carcinogens, regardless of MOA. In lieu of chemical-specific data on which age or life-stage specific risk estimates or potencies can be determined, default age-dependent adjustment factors can be applied when assessing cancer risk for early-life exposures to chemicals that cause cancer through a mutagenic MOA. With regard to other carcinogenic pollutants (*e.g.*, non-mutagenic) for which early-life susceptibility data are lacking, it is the Agency's long-standing science policy position that use of the linear low-dose extrapolation approach (without further adjustment) provides adequate public health conservatism in the absence of chemical-specific data indicating differential early-life susceptibility or when the MOA is not mutagenicity.<sup>7</sup> The basis for this methodology is provided in the EPA's 2005 *Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens*.<sup>8</sup>

The EPA also disagrees with the commenter that a children's default safety factor of 10 or more should be added to the EPA's reference values in response to the 10X factor enacted by Congress in the Food Quality Protection Act (FQPA) in 1996.<sup>9,10</sup> In response to the EPA noncancer reference value derivation, the Agency evaluated the methods for considering children's risk in the development of reference values. As part of the response, the EPA (*i.e.*, the Science Policy Council and Risk Assessment Forum) established the RfD/reference

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<sup>7</sup> U.S. EPA (2002). *A Review of the Reference Dose and Reference Concentration Processes*. U.S. Environmental Protection Agency, Risk Assessment Forum, Washington, DC, EPA/630/P-02/002F. Available online at <https://www.epa.gov/osa/review-reference-dose-and-reference-concentration-processes>.

<sup>8</sup> U.S. EPA (2005). *Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens*. EPA/630/R-03/003F. Washington, DC. Available online at: [https://www3.epa.gov/airtoxics/childrens\\_supplement\\_final.pdf](https://www3.epa.gov/airtoxics/childrens_supplement_final.pdf).

<sup>9</sup> U.S. EPA, *Pesticide: Regulating Pesticides. The Food Quality Protection Act (FQPA)*.

<sup>10</sup> Available at <https://www.epa.gov/laws-regulations/summary-food-quality-protection-act>.

concentration (RfC) Technical Panel to develop a strategy for implementing the FQPA and examine the issues relative to protecting children's health and application of the 10X safety factor. One of the outcomes of the Technical Panel's efforts was an in-depth review of a number of issues related to the RfD/RfC process.<sup>11</sup> The most critical aspect in the derivation of a reference value pertaining to the FQPA has to do with variation between individual humans and is accounted for by a default UF when no chemical-specific data are available. The EPA reviewed the default UF for inter-human variability and found the EPA's default value of 10 adequate for all susceptible populations, including children and infants. The EPA also recommended the use of chemical-specific data in preference to default UFs when available<sup>12</sup> and has developed Agency guidance to facilitate consistency in the development and use of data-derived extrapolation factors for RfCs and RfDs.<sup>13</sup> Additionally, the EPA also applies a database UF, which is intended to account for the potential for deriving an under protective RfD/RfC as a result of an incomplete characterization of the chemical's toxicity. In addition to the identification of toxicity information that is lacking, review of existing data may also suggest that a lower reference value might result if additional data were available.

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<sup>11</sup> U.S. EPA (2002). *A Review of the Reference Dose and Reference Concentration Processes*. U.S. Environmental Protection Agency, Risk Assessment Forum, Washington, DC, EPA/630/P-02/002F. Available online at <https://www.epa.gov/osa/review-reference-dose-and-reference-concentration-processes>.

<sup>12</sup> U.S. EPA (1994). *Methods for derivation of inhalation reference concentrations and application of inhalation dosimetry*. (EPA/600/8-90/066F). Research Triangle Park, NC. <http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=71993>.

<sup>13</sup> U.S. EPA (2014). *Guidance for Applying Quantitative Data to Develop Data-Derived Extrapolation Factors for Interspecies and Intraspecies Extrapolation*. EPA/100/R-14/002F. <https://www.epa.gov/risk/guidance-applying-quantitative-data-develop-data-derived-extrapolation-factors-interspecies-and>.

In conclusion, the estimated risks must also be considered in the context of the full set of assumptions used for this risk assessment. The EPA's dose-response values for HAP are considered plausible upper-bound estimates with an appropriate age-dependent adjustment factor. The EPA's chronic noncancer reference values have been derived considering the potential susceptibility of different subgroups, with specific consideration of children. An extra 10-fold UF is not needed in the RfC/RfD methodology because the currently applied factors are considered sufficient to account for uncertainties in the database from which the reference values are derived.

Regarding the commenter's assertion that the EPA has underestimated health threats to communities exposed to multiple sources, the EPA typically examines facility-wide risks to provide additional context to the source category risks. The development of facility-wide risk estimates provides additional information about the potential cumulative risks in the vicinity of the RTR sources, as one means of informing potential risk-based decisions about the RTR source category in question. Because these risk estimates were derived from facility-wide emissions estimates that have not generally been subjected to the same level of engineering review as the source category emission estimates, they may be less certain than the risk estimates for the source category in question, but they remain important for providing context as long as their uncertainty is taken into consideration in the process.

The EPA notes that section 112(f)(2) of the CAA expressly preserves the EPA's use of the two-step process for developing standards to address residual risk and interpret "acceptable risk" and "ample margin of safety" as developed in the Benzene NESHAP. In the Benzene NESHAP, the EPA rejected approaches that would have mandated consideration of background levels of pollution in assessing the acceptability of risk, concluding that "With respect to

considering other sources of risk from benzene exposure and determining the acceptable risk level for all exposures to benzene, the EPA considered this inappropriate because only the risk associated with the emissions under consideration are relevant to the regulation being established and, consequently, the decisions being made.” (54 FR 38044, September 14, 1989). The EPA’s authority to use the two-step process laid out in the Benzene NESHAP, and to consider a variety of measures of risk to public health, is discussed more thoroughly in the preamble to the proposed rule. Nothing in the CAA or the Benzene NESHAP in any way forecloses the EPA from considering facility-wide risks in making a determination under CAA section 112(f)(2), as such information can constitute relevant health information. Although not considered in the determination of acceptable risk, the EPA notes that background risks or contributions to risk from sources outside the source category under review could be one of the relevant factors considered in the ample margin of safety determination, along with cost and economic factors, technological feasibility, and other factors.

The EPA acknowledges it does not have screening values for some of the PB-HAP but the EPA disagrees that the multipathway assessment is inadequate. In the Air Toxics Assessment Library (available at: <https://www.epa.gov/fera/risk-assessment-and-modeling-air-toxics-risk-assessment-reference-library>), the EPA developed the current PB-HAP list considering all of the available information on persistence and bioaccumulation. This list reviewed HAP identified as PB-HAP by other EPA program offices (*e.g.*, the Great Waters Program). This list was peer-reviewed by the SAB and found to be acceptable and, therefore, the EPA considers it to be reasonable for use in the RTR program. Based on these sources and the limited available information on the persistence and bioaccumulation of other HAP, the EPA does not think that

the potential for multipathway risk from other HAP rises to the level of the PB-HAP currently on the list.

The EPA disagrees that it has failed to assess potential risks from lead. As for other pollutants included in the assessment of noncancer hazard from inhalation, RTR assessments include lead in the calculation of TOSHIs. For lead, neurological and developmental TOSHIs are calculated. In these indices, modeled concentrations of lead are compared to the 2008 lead National Ambient Air Quality Standards (NAAQS) (which was reviewed and retained in 2016),<sup>14</sup> and other pollutant concentrations are compared to their respective noncancer reference values, then the individual pollutant HQs are summed to calculate the TOSHIs. To assess the potential for hazard from multipathway exposures, modeled air concentrations are compared to the lead NAAQS. The EPA notes that in developing the NAAQS for lead, air-related multipathway effects were already taken into account. That is, as noted at 73 FR 66971, “As was true in the setting of the current standard, multimedia distribution of and multipathway exposure to Pb that has been emitted into the ambient air play a key role in the Agency’s consideration of the Pb NAAQS.”

While recognizing that lead has been demonstrated to exert “a broad array of deleterious effects on multiple organ systems,” the lead NAAQS targets the effects associated with relatively lower exposures and associated blood lead levels, specifically nervous system effects in children including cognitive and neurobehavioral effects (73 FR 66976). The 2008 decision on the lead NAAQS was informed by an evidence-based framework for neurocognitive effects in young children. In applying the evidence-based framework, the EPA focused on a subpopulation of

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<sup>14</sup> <https://www.epa.gov/lead-air-pollution/national-ambient-air-quality-standards-naaqs-lead-pb>.

U.S. children, those living near air sources and more likely to be exposed at the level of the standard; to the same effect see 73 FR 67000/3--“The framework in effect focuses on the sensitive subpopulation that is the group of children living near sources and more likely to be exposed at the level of the standard. The evidence-based framework estimates a mean air-related IQ loss for this subpopulation of children; it does not estimate a mean for all U.S. children”; 73 FR 67005/1--“the air-related IQ loss framework provides estimates for the mean air-related IQ loss of a subset of the population of U.S. children, and there are uncertainties associated with those estimates. It provides estimates for that subset of children likely to be exposed to the level of the standard, which is generally expected to be the subpopulation of children living near sources who are likely to be most highly exposed.” In addition, in reviewing and sustaining the lead primary NAAQS, the EPA notes that the Court specifically noted that the rule was targeted to protect children living near lead sources: “EPA explained that the scientific evidence showing the impact of lead exposure in young children in the United States led it ‘to give greater prominence to children as the sensitive subpopulation in this review’ and to focus its revision of the lead NAAQS on the ‘sensitive subpopulation that is the group of children living near [lead emission] sources and more likely to be exposed at the level of the standard.’ Given the scientific evidence on which it relied, the EPA’s decision to base the revised lead NAAQS on protecting the subset of children likely to be exposed to airborne lead at the level of the standard was not arbitrary or capricious.” *Coalition of Battery Recyclers*, 604 F. 3d at 618.

Regarding the comment that the EPA underestimates the cancer, chronic noncancer, and acute health risks by using modeling assumptions that ignore real-world exposures, underestimating risk from other chemicals such as benzene, 1,3-butadiene, nickel and manganese, due to the EPA’s refusal to follow the best available science and ignoring the more

protective health values created by CalEPA's OEHHA, the EPA uses dose-response information that has been obtained from various sources. As noted above, the dose-response information is prioritized according to (1) conceptual consistency with the EPA's risk assessment guidelines and (2) level of public and peer review received. The prioritization process is aimed at incorporating into RTR assessments the best available science with respect to dose-response information. Application of this approach generally results in the following priority order: (1) U.S. EPA IRIS, (2) Agency for Toxic Substances and Disease Registry (ATSDR), (3) CalEPA, and (4) other sources. Deviations from this prioritization only occur if there are concerns that the top priority values have become outdated or newer evidence suggests they are not protective; such was not the case for the values used in this RTR assessment. Based on this approach, the EPA determined that the best available science was used in the risk assessment, that the risks are acceptable, that the existing standards provide an ample margin of safety to protect public health, and that no changes are needed from the proposal based on this comment.

#### 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 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 chronic noncancer 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.

In the second step of the approach, the EPA considers whether the emissions standards

provide an ample margin of safety to protect public health “in consideration of all health information, including the number of persons at risk levels higher than approximately 1-in-1 million, as well as other relevant factors, including costs and economic impacts, technological feasibility, and other factors relevant to each particular decision.” *Id.* We evaluated additional control measures to reduce the number of persons exposed at risk levels higher than approximately 1-in-1 million and determined that these additional control measures were not reasonable considering the costs and economic impacts. Therefore, we concluded that the major source Iron and Steel Foundries NESHAP provides an ample margin of safety to protect public health without any revisions. After conducting the ample margin of safety analysis, we consider whether a more stringent standard is necessary to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect.

We evaluated all of the comments on the risk review and determined that no changes to the review are needed. For the reasons explained in the proposal, we determined that the risks from the major source Iron and Steel Foundries source category are acceptable, the current standards provide an ample margin of safety to protect public health, and more stringent standards are not necessary to prevent an adverse environmental effect. Therefore, pursuant to CAA section 112(f)(2), we are finalizing our residual risk review as proposed and readopting the standards for the major source Iron and Steel Foundries source category.

#### *B. Technology Review for the Iron and Steel Foundries Source Categories*

1. What did we propose pursuant to CAA section 112(d)(6) for the Iron and Steel Foundries source categories?

Pursuant to CAA section 112(d)(6), we proposed to conclude that no revisions to the current major source or area source NESHAP for Iron and Steel Foundries are necessary. Based

on our technology review described in the October 9, 2019, proposal (84 FR 54414), we determined that there are no developments in practices, processes, or control technologies that necessitate revisions to the NESHAP for major source Iron and Steel Foundries (40 CFR part 63, subpart EEEEE) or the NESHAP for area source Iron and Steel Foundries (40 CFR part 63, subpart ZZZZZ).

2. How did the technology review change for the Iron and Steel Foundries source categories?

The EPA has not made any changes to the technology review since the proposal was published on October 9, 2019. We are finalizing the technology review as proposed with no changes.

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

*Comment:* Several commenters agreed with the EPA's proposed technology review conclusions. Other commenters suggested that the EPA needed to revise the standards because the EPA specifically considered the National Vehicle Mercury Switch Recovery Program (NVMSRP) to be a "development" with respect to the major source MACT standards. These commenters also suggested that the EPA should consider fugitive control measures required by Bay Area Air Quality Management District ("BAAQMD") and South Coast Air Quality Management District ("SCAQMD") standards and work practices considered in the EPA's proposed Integrated Iron and Steel Manufacturing RTR proposed rule (84 FR 42704, August 16, 2019) to be "developments" for major and area source foundries and take these into account in this rulemaking.

*Response:* As an initial matter, CAA section 112(d)(6) does not require the EPA to revise the standards if a "development" is identified, but to consider whether it is necessary to revise the standards in light of the developments. While we acknowledge that the NVMSRP was

initiated after the major source rule (40 CFR part 63, subpart EEEEE) was promulgated, we note that the major source rule includes requirements to remove mercury switches from automotive scrap consistent with the NVMSRP and that it acted as a catalyst for the development of the NVMSRP. Because the major source rule already requires mercury switch removal consistent with this “development,” no additional revisions to the major source rule were deemed “necessary.” With respect to additional fugitive emissions requirements, we specifically assessed adding improved capture and control requirements to reduce emissions of fugitive metal HAP emissions similar to those suggested by the commenter (see *Control Cost Estimates for Metal HAP Emissions from Iron and Steel Foundries*, which is available in the docket as Docket Item No. EPA-HQ-OAR-2019-0373-0015). We concluded that these control measures were not cost effective and that it was not necessary to revise the rule to reduce fugitive metal HAP emissions. Thus, we maintain our conclusion that it is not necessary to revise the standards based on the developments cited by the commenter.

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

We evaluated all of the comments on the technology reviews and determined that no changes to the reviews are needed. Therefore, pursuant to CAA section 112(d)(6), we are finalizing our technology reviews as proposed.

#### *C. Removal of the SSM Exemptions*

##### 1. What did we propose?

The EPA proposed amendments to the major and area source Iron and Steel Foundries NESHAP to remove the provisions related to SSM in order to ensure that they are consistent with the Court decision in *Sierra Club v. EPA*, 551 F. 3d 1019 (D.C. Cir. 2008) that standards apply at all times. As detailed in the October 2019 proposal, we proposed the following

amendments.

- Revising the General Provisions applicability tables (Table 1 to subpart EEEEE of part 63 and Table 3 to subpart ZZZZZ of part 63) to change the following entries from a “yes” in column 3 (indicating the provision applies) to a “no”:
  - 40 CFR 63.6(e)
  - 40 CFR 63.6(f)(1)
  - 40 CFR 63.6(h)(1)
  - 40 CFR 63.7(e)(1)
  - 40 CFR 63.8(c)(1)(i) and (iii)
  - 40 CFR 63.8(d)(3)
  - 40 CFR 63.10(b)(2)(i), (ii), (iv), and (v)
  - 40 CFR 63.10(c)(7) [for subpart EEEEE]; 40 CFR 63.10(c) [for subpart ZZZZZ]
  - 40 CFR 63.10(d)(5)
  - 40 CFR 63.10(e)(3) [for subpart ZZZZZ; subpart EEEEE already indicates “no”]
- Revising the following paragraphs in 40 CFR part 63, subpart EEEEE, to remove the language in the rule that exempted affected sources from compliance with the standards during periods of SSM, as well as references to General Provision sections or requirements that no longer apply.
  - 40 CFR 63.7710(a) to remove reference to 40 CFR 63.6(e)(1)(i)
  - 40 CFR 63.7720(a) to delete the phrase “..., except during periods of startup, shutdown, or malfunction”
  - 40 CFR 63.7720(c) to delete and reserve the paragraph
  - 40 CFR 63.7746(b) to delete and reserve the paragraph

- 40 CFR 63.7751(b)(4) and (c) to delete and reserve the paragraphs
- 40 CFR 63.7752(a)(2) to remove reference to 40 CFR 63.6(e)(3) and require records require by 40 CFR 63.10(b)(2)(iii)
- 40 CFR 63.7752(b)(4) to remove the records needed to indicate whether deviation of a continuous emission monitoring system occurred during periods of SSM
- Revising the following paragraphs in 40 CFR part 63, subpart ZZZZZ, to remove references to General Provision sections or requirements that no longer apply.
  - 40 CFR 63.10890(i) [re-designated to 40 CFR 63.10890(j)] to remove reference to 40 CFR 63.6(e)
  - 40 CFR 63.10897(g) to remove reference to minimizing periods of SSM
  - 40 CFR 63.10899(b) to revise the general reference to records required by 40 CFR 63.10 to specify that only records required by 40 CFR 63.10(b)(2)(iii), (vi) through (xiv), and (b)(3) are necessary
- Adding 40 CFR 63.7752(d) of subpart EEEEE and 40 CFR 63.10899(b)(15) of subpart ZZZZZ to specify recordkeeping requirements during a malfunction.
- Revising 40 CFR 63.7751(b)(7) and (8) of subpart EEEEE and 40 CFR 63.10899(c) of subpart ZZZZZ to specify reporting requirements for specific deviations.

We proposed that the effective date of these revisions be the date of promulgation of the final rule. More information concerning the elimination of SSM provisions is in the preamble to the proposed rule (84 FR 54415-44419, October 9, 2019).

## 2. What changed since proposal?

For the area source rule (40 CFR part 63, subpart ZZZZZ), we are finalizing the revisions to the SSM provisions as proposed with no changes. For the major source rule (40 CFR part 63,

subpart EEEEE), we are finalizing most revisions regarding SSM provisions as proposed such that the emission limits apply at all times without the need for different standards during periods of startup and shutdown. However, for new and existing major source cupola melting furnaces, we are finalizing specific work practice standards for VOHAP emissions that apply during startup and shutdown. For cupola melting furnaces, we are finalizing that the 20 ppmv VOHAP emission limit in 40 CFR 63.7690(a)(8) applies only while the cupola is “on blast” (normal operations) and we are adding work practice standards at 40 CFR 63.7700(g) to limit VOHAP emissions during periods of off blast, which includes startup, shutdown, or idling. We are adding reference to these new work practice standards in 40 CFR 63.7710(b) so that the O&M plan specifically covers the capture and control systems used to comply with the new work practice standards. We are adding reference to these new work practice standards at 40 CFR 63.7740(e) and 63.7741(d) to require temperature monitoring to demonstrate that the afterburner or other thermal combustion device flame is present as required in 40 CFR 63.7700(g)(2)(i). We are also adding additional recordkeeping requirements at 40 CFR 63.7744(e) for facilities to demonstrate continuous compliance with the new work practice standards. These records include: combustion zone temperature for the cupola’s thermal combustion control device, the time blast air is started to begin the coke bed burn-in, the time the cupola afterburner or other thermal combustion device is lit, the time metal production starts during cupola startup, the time when metal production ends, the time slag removal was completed, the time the afterburner or other thermal combustion device is turned off during cupola shutdown, and the times idling starts and stops.

With regard to compliance dates, we are providing 180 days to comply with these new work practice standards for major source iron and steel foundries and also for the SSM related provisions in 40 CFR 63.7720 including provisions that state the emission limits apply at all

times. We are retaining the rule-specific SSM provisions from the original NESHAP (including the requirement to have an SSM plan) for the first 180 days until the compliance date for the new work practice standards becomes effective. For other proposed SSM revisions in the major source rule and for all of the proposed SSM revisions in that area source rule, which are predominately revisions to General Provisions applicability tables, we are finalizing requirements that foundry owners or operators will need to comply with these revisions on the date this final rule is published in the *Federal Register*.

### 3. What are the key comments and what are our responses?

*Comments:* Several commenters supported the proposed removal of the SSM exemptions. One commenter indicated that meeting the parametric monitoring requirement of 1,300 degrees Fahrenheit for afterburners that are used to control VOHAP emissions from cupola furnaces is likely to be an issue during cupola startup and shutdown and recommended new definitions of “cupola startup” and “cupola shutdown,” and revisions to the definition of “off blast” as follows:

*Cupola Startup* means the time beginning when molten metal is first tapped from a cupola that had previously been shut down.

*Cupola Shutdown* means the time ending once the last charge is added to the cupola preceding either cupola banking or cupola bottom drop.

*Off Blast* means those periods of cupola operation when the cupola is not actively being used to produce molten metal. Off blast conditions also include idling conditions when the blast air is turned off or down to the point that the cupola does not produce additional molten metal.

The same commenter recommended that the compliance date related to SSM-related rule changes be revised to 180 days after the date of the final rule for both subparts EEEEE and ZZZZZ of 40 CFR part 63 to allow facilities sufficient time to extract O&M plans that may be

integrated with SSM plans as well as to develop other facility-specific procedures to address amended rule requirements related to SSM events.

*Response:* As discussed in the preamble to the October 2019 proposal (84 FR 54415, October 9, 2019), we acknowledged that the cupola afterburners would not be able to meet the 1,300 degrees Fahrenheit parametric monitoring temperature limit during off blast conditions, but we expected that the emissions would still be compliant with the 20 ppmv VOHAP emission limit. Therefore, initially, we did not understand why the new definitions would be helpful or necessary. So, we contacted the commenter to seek clarification of their comments. On February 12, 2020, we had a teleconference meeting with the commenter to try to better understand the issue. The notes of the meeting are in the docket for this rulemaking (Docket ID No. EPA-HQ-OAR-2019-0373). On March 9, 2020, the commenter provided a document providing further detail of the cupola startup and shutdown procedures and suggested work practices as an alternative to the suggested definitions (see email from Jeff Hannapel to Phil Mulrine dated March 9, 2020, included in Docket ID No. EPA-HQ-OAR-2019-0373). On April 2, 2020, we had an additional teleconference meeting with the commenter to discuss the information provided in the March 9, 2020, email. The notes of this meeting are also in the docket for this rulemaking (Docket ID No. EPA-HQ-OAR-2019-0373).

During the meetings, the commenter clarified that their main concern was the VOHAP emissions limit, not the temperature limit. They explained that there is uncertainty as to whether the cupola furnaces would meet the VOHAP limit during these periods and that no one has ever tested emissions during these periods. We also learned that the definitions suggested by the commenter were intended to remove preparatory steps from what was considered startup because of the uncertainty regarding whether they would be able to meet the VOHAP emissions limit

during those periods. However, as some of these preparatory steps have the potential to emit VOHAP, we concluded that the suggested definitions were not consistent with the 2008 Court decision in *Sierra Club v. EPA*, 551 F. 3d 1019 (D.C. Cir. 2008).

Based on our improved understanding of the startup and shutdown procedures for the cupola furnace and related issues, we have determined that work practice standards are appropriate for these periods. As noted in CAA section 112(h)(1), “if it is not feasible in the judgment of the Administrator to prescribe or enforce an emission standard for control of a hazardous air pollutant or pollutants, the Administrator may, in lieu thereof, promulgate a design, equipment, work practice, or operational standard, or combination thereof, which in the Administrator's judgment is consistent with the provisions of subsection (d) or (f).” CAA section 112(h)(2) defines the phrase “not feasible to prescribe or enforce an emission standard” as any situation in which the Administrator determines that either “a hazardous air pollutant or pollutants cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant, or that any requirement for, or use of, such a conveyance would be inconsistent with any Federal, State or local law” or “the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations.”

We have concluded that, during periods of cupola off blast, which includes startup, shutdown, and idling, it is not feasible to prescribe or enforce the numeric limits of the emission standard for VOHAP and that standards may be appropriately established under CAA section 112(h). The cupola furnace is essentially an open column during the initial cupola startup steps and during the final cupola shutdown steps, and the emissions are not emitted through a conveyance. Further, the initial procedures to prepare the cupola bed or remove the cupola from service cannot be safely completed with the cupola VOHAP control system operating. After

further evaluation, we have determined the appropriate requirements for these steps (specifically refractory curing, cupola bed preparation, and the initial phases of cupola coke bed preparation during cupola startup and the final cooling stages and cupola banking or bottom drop during cupola shutdown) are the general duty requirements in 40 CFR 63.7710(a) to operate according to procedures to minimize emissions as contained in the O&M plan and to comply with the opacity limit at 40 CFR 63.7690(a)(7). We are adding definitions of “cupola startup” and “cupola shutdown” to describe the various steps for cupola startup and cupola shutdown to clarify when the work practice standards apply. For other startup and shutdown procedures, the cupola tuyere covers are closed, and the capture and control system can be operated. We modified the definition of “off blast” to clearly specify that off blast includes shutdown procedures as well as startup procedures. Even though the capture system can be operated during portions of off blast periods, we determined that the application of reliable emissions measurement methodologies to this source during these off blast periods is not practicable due to technological limitations. First, the flow rates during periods of off blast are typically low and highly variable. Additionally, the off blast periods are short duration (*e.g.*, less than 3 hours), and the required duration of a performance test to evaluate compliance with the VOHAP emission limit is 3 hours. As such, we determined that work practice standards are appropriate for VOHAP during off blast periods. We are requiring that owners/operators (1) begin operating the cupola afterburner or other thermal combustion device as soon as practicable after beginning the coke bed preparatory step but no later than 30 minutes after the blast air is started to begin the coke bed burn-in and (2) operate the afterburner or other thermal combustion device with a flame present at all times during other off blast periods. Maintaining the operation of the afterburner during off blast periods will ensure VOHAP emissions that come from the process are combusted. Based on our understanding of

the current operations of these furnaces and practices applied in the industry, we believe these requirements reflect the procedures of the best performing sources.

With respect to the compliance dates related to SSM changes, we proposed that the proposed revisions would become effective immediately because we expected that facilities could comply immediately with the standards at all times and that no or limited revisions in procedures would be needed. Because we are finalizing specific work-practice standards that apply to VOHAP emissions during cupola startup and shutdown for major source iron and steel foundries, we expect that some facilities will need to revise their startup procedures and revise their O&M plans to comply with the new work practice standards. Consequently, as suggested by the commenter, we are providing 180 days for major source facilities to transition from their existing SSM plans to compliance with the emission limitations, including the new work practice standards, at all times. We consider 180 days to be the minimum time needed to complete the management of these changes, which includes evaluating the changes, forming a team to accomplish the changes, conducting safety assessments, updating associated plans and procedures, and providing training to implement the changes. We consider a period of 180 days to be the most expeditious compliance period practicable, and, thus, we are finalizing the requirement that existing affected sources be in compliance with all of the revised requirements in the major source NESHAP within 180 days of the effective date of this final rule. We are revising 40 CFR 63.7720(a) and (c), which require preparation and operation according to an SSM plan, to provide a 180-day compliance period with these specific SSM provisions in the major source NESHAP as foundry owners or operators transition to the new work practice standards for cupola VOHAP emissions. Additional time is not required for the areas source NESHAP SSM revisions that were proposed or other major source NESHAP SSM revisions (not

referenced above) that were proposed because operational changes are not needed to implement these other revisions, which are primarily revisions to the General Provisions applicability tables. As such, we are finalizing that those requirements become effective upon the date of promulgation as proposed.

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

We evaluated all comments on the EPA's proposed amendments to remove the SSM provisions. For the reasons explained in the proposed rule, we determined that the proposed removal of the SSM exemptions is required to be consistent with the 2008 Court decision that standards apply at all times. For the area source NESHAP, we are finalizing our approach for removing the SSM exemptions as proposed. For the major source NESHAP, we are finalizing our approach for removing the SSM exemptions as proposed, except for provisions related to cupola furnace VOHAP emission limits. More information concerning the non-cupola amendments that we are finalizing for SSM is in the preamble to the proposed rule (84 FR 54415-54419, October 9, 2019). For cupola furnaces at major source iron and steel foundries, as described above in section IV.C.3 of this preamble, we determined that work practice standards during startup and shutdown are appropriate for the VOHAP standards under the provision of CAA section 112(h). We added monitoring and recordkeeping requirements for foundry owners or operators to demonstrate compliance with the new work practice standards. The temperature monitoring requirement is the same as needed to demonstrate compliance during normal “on blast” conditions, so we expect the monitoring requirement will not increase burden appreciably. The recordkeeping requirements are new and specific to documenting relevant times of off blast so facilities can demonstrate compliance with the new work practice standards. Semiannual reporting of deviations is required in the major source NESAHP, so reporting of deviations from

the new work practice standards is also required. We determined that these additional requirements were the minimum necessary to demonstrate compliance with the new work practice standards for VOHAP from cupola furnaces during periods of off blast.

For the reasons detailed in section IV.C.3 of this preamble, we are finalizing these new work practice standards in the major source NESHAP during cupola startup and shutdown and providing 180 days to comply with these new requirements. During this 180-day transition period, major source foundry owners or operators must operate according to their SSM plan and we are retaining these specific SSM provisions in the major source NESHAP at 40 CFR 63.7720(a) and (c) for the 180-day transition period. We determined 180 days to be the most expeditious compliance period practicable to implement operational changes. For affected sources that commence construction or reconstruction after the effective date of these amendments, they must be in compliance with all emission limitations, including the new work practice standards, upon startup because additional time is not needed for these sources.

#### *D. Electronic Reporting*

##### 1. What did we propose?

We proposed amendments to the major and area source Iron and Steel Foundries NESHAP to require foundry owners or operators to submit electronic copies of initial notifications, notifications of compliance status, performance test reports, performance evaluation reports, and semiannual reports through the EPA's Central Data Exchange (CDX) using CEDRI. Additionally, we proposed two broad circumstances in which electronic reporting extensions may be provided at the discretion of the Administrator. The EPA proposed these extensions to protect owners or operators from noncompliance in cases where they are unable to successfully submit a report by the reporting deadline for reasons outside of their control,

including CDX and CEDRI outages and *force majeure* events, such as acts of nature, war, or terrorism.

## 2. What changed since proposal?

We determined that no changes were necessary to the proposed requirements for foundry owners or operators to submit initial notifications, notifications of compliance status, performance test reports, performance evaluation reports, and semiannual reports electronically using CEDRI. Therefore, we are finalizing the electronic reporting provisions as proposed (84 FR 54419, October 9, 2019).

## 3. What are the key comments and what are our responses?

*Comment:* The EPA received one comment generally supporting the proposed amendment to require electronic reporting but asserting that the *force majeure* language should be removed. The commenter expressed concern that the *force majeure* provisions violate the requirement for standards to be continuous and that they would allow unreported exceedances to go unchecked indefinitely.

*Response:* Regarding the *force majeure* provisions, we disagree that the ability to request a reporting extension would create a mechanism that owners or operators could use to evade binding emissions standards or provide a mechanism where those emission standards do not apply at all times. Also, we note that there is no exception or exemption to reporting, only a method for requesting an extension of the reporting deadline. There is no predetermined timeframe for the length of extension that can be granted, as this is something best determined by the Administrator when reviewing the circumstances surrounding the request. Different circumstances may require a different length of extension for electronic reporting. For example, a tropical storm may delay electronic reporting for a day, but a category 5 hurricane event may

delay electronic reporting much longer, especially if the facility has no power, and, as such, the owner or operator has no ability to access electronically stored data or to submit reports electronically. The Administrator will be the most knowledgeable on the events leading to the request for extension and will assess whether an extension is appropriate and, if so, determine a reasonable length. The Administrator may even request that the report be sent in hard copy until electronic reporting can be resumed. While no new fixed duration deadline is set, the regulation does require that the report be submitted electronically as soon as possible after the CEDRI outage is resolved or after the *force majeure* event occurs.

*Comment:* One commenter stated that electronic reporting through CEDRI should not be required for states delegated to administer/enforce the NESHAP, unless electronic reporting is specifically required by the state.

*Response:* Regarding having delegated states determine whether electronic reporting is required, we note that the delegation of authority to states does not relieve facilities of their obligation to report to the EPA per 40 CFR 63.13(a), which requires all requests, reports, applications, submittals, and other communications shall be submitted to the appropriate Regional office of the EPA. In the case of the electronic reporting, those obligations are met through the submission to CEDRI. We are retaining the requirement to report through CEDRI for all reporters, as proposed. To clarify that electronic submission when required by regulation meets the requirement of 40 CFR 63.13(a), Table 1 of subpart EEEEE and Table 3 of ZZZZZ have been amended to specify in the explanation column that “Except: reports and notifications required to be submitted to CEDRI meet this obligation through electronic reporting.”

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

We are finalizing as proposed a requirement in both the area source NESHAP and major

source NESHAP that owners or operators of iron and steel foundries submit electronic copies of notifications, performance evaluation reports, and semiannual compliance reports using CEDRI. We also are finalizing, as proposed, provisions that allow facility owners or operators a process to request extensions for submitting electronic reports for circumstances beyond the control of the facility (*i.e.*, for a possible outage in the CDX or CEDRI or for a *force majeure* event). Based on public comments received, we are finalizing an additional revision to the General Provision tables (Table 1 to subpart EEEEE and Table 3 to subpart ZZZZZ) to add a specific entry for 40 CFR 63.13(a), and clarifying in the explanation column that electronic submissions to CEDRI meet the reporting requirement at 40 CFR 63.13(a). These amendments will increase the ease and efficiency of data submittal for owners and operators of iron and steel foundries and will make the data more accessible to regulators and the public.

#### *E. Technical and Editorial Corrections*

##### 1. What did we propose?

We proposed one editorial correction for 40 CFR part 63, subpart EEEEE, to revise 40 CFR 63.7732(e)(1) to correct the reference to “paragraphs (b)(1)(i) through (v)” to be “paragraphs (e)(1)(i) through (v).”

We proposed several technical and editorial corrections for 40 CFR part 63, subpart ZZZZZ as follows.

- To match requirements in 40 CFR part 63, subpart EEEEE, revise 40 CFR 63.10885(a)(1) to add the sentence: “Any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed and/or cleaned to the extent practicable such that the materials do not include lead components, mercury switches, chlorinated plastics, or free organic liquids can be included in this certification.”

- Revise 40 CFR 63.10890(c) to correct the reference to “§63.9(h)(1)(i)” to be “§63.9(h)(2)(i).”
- Revise 40 CFR 63.10890(f) to correct the reference to “§63.10(e)” to be “§63.13.”
- Revise 40 CFR 63.10897(d)(3) and (g) to replace all instances of “correction action” with “corrective action” to correct typographical errors.
- Revise 40 CFR 63.10899(c) to correct the reference to “§63.10(e)” to be “§63.13.”
- To match requirements in 40 CFR part 63, subpart EEEEE, revise the entry for 40 CFR 63.9 in Table 3 to subpart ZZZZZ to add an explanation in column 4 to read “Except for opacity performance tests.”

## 2. What changed since proposal?

We determined that no changes were necessary to the proposed technical and editorial corrections outlined above. Therefore, we are finalizing these technical and editorial corrections with no changes (84 FR 54420, October 9, 2019). We did receive notification of a typographical error in 40 CFR 63.10897(d)(1)(i) of subpart ZZZZZ, which specifies detection limits for bag leak detectors. The detectors must be capable of detecting emissions of PM at concentrations of 10 milligrams per actual cubic meter. This requirement includes a parenthetical providing the limit in units of grains per actual cubic feet. Unfortunately, in the area source rule, the limit in units of grains per actual cubic feet included a typographical error, listing it as 0.00044 rather than 0.0044 grains per actual cubic feet. The correct unit conversion for 10 milligrams per actual cubic meter is 0.0044 grains per actual cubic feet. The correct value is included in the major source rule at 40 CFR 63.7741(b)(1). Based on the identification of this additional typographical error, we are finalizing revision of 40 CFR 63.10897(d)(1)(i) to revise the parenthetical from “(0.00044 grains per actual cubic foot)” to “(0.0044 grains per actual cubic foot).”

3. What are the key comments and what are our responses?

The EPA did not receive any comments on the proposed technical and editorial corrections.

4. What is the rationale for our final approach to technical and editorial corrections?

We identified necessary technical and editorial corrections and received no comments except for the identification of a typographical error (discussed above) at 40 CFR 63.10897(d)(1)(i) in subpart ZZZZZ. Therefore, we are finalizing the revisions, including correction of the typographical error in order to correct and clarify the requirements in the rules.

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

*A. What are the affected sources?*

There are approximately 45 major source iron and steel foundries subject to 40 CFR part 63, subpart EEEEE, and approximately 390 area source iron and steel foundries subject to 40 CFR part 63, subpart ZZZZZ.

*B. What are the air quality impacts?*

Because we are not revising the emission limitations for iron and steel foundries other than the new work practice standards for VOHAP for major sources during startup and shutdown for cupola melting furnaces, we do not anticipate any quantifiable air quality impacts as a result of the final amendments. However, since the final amendments include the removal of the SSM exemptions for both major and area sources and the addition of new work practice standards for cupola startup and shutdown for major sources, this final rule may reduce emissions by an unquantified amount by ensuring proper operation of control devices and other measures during SSM periods.

*C. What are the cost impacts?*

We expect that the final amendments will have minimal cost impacts for iron and steel foundries. The final editorial corrections will have no cost impacts. The final revisions to use electronic reporting effectively replace existing requirements to mail in copies of the required reports and notifications. We expect that the electronic system will save some time and expense compared to printing and mailing the required reports and notifications; however, it will take some time for foundry owners or operators to review the new electronic notification and reporting form, review their recordkeeping processes, and potentially revise their processes to more efficiently complete their semiannual reports. There may also be initial costs associated with electronic reporting of performance tests. We are also finalizing revisions to SSM provisions. Again, these revisions are expected to have minimal impact on affected iron and steel foundries. For major source iron and steel foundries, we are eliminating the need to develop a SSM plan or submit an immediate SSM report when the SSM plan is not followed and there is an exceedance of an applicable emission limitation. While this may reduce some burden, iron and steel foundry owners or operators will still need to assess their operations and make plans to

achieve the emission limitations at all times, including periods of startup, shutdown, or malfunction. Additionally, we are adding new recordkeeping requirements for major source foundries related to cupola off blast periods, which includes cupola startup, shutdown, and idling periods to demonstrate compliance with the new work practice standards.

For the 45 major source iron and steel foundries subject to 40 CFR part 63, subpart EEEEE, we estimate the first-year costs associated with the final electronic reporting and SSM revisions will be \$107,000 or approximately \$2,380 per major source foundry. This includes one-time costs to learn the electronic reporting templates and set up recordkeeping systems to work with the electronic reporting, one-time costs for facilities that conducted a source test to learn the electronic reporting system for submitting performance tests, and costs associated with the new recordkeeping requirements for the work practice standards to reduce cupola VOHAP emissions while off blast. As performance tests are required every 5 years, we expect facilities will continue to incur additional costs for reporting performance test results, since facilities reporting performance test results in Year 2, 3, 4, or 5 would be using that system for the first time. For Years 2 and on, owners or operators of major source foundries will incur annual costs associated with recordkeeping requirements for the work practice standards to reduce cupola VOHAP emissions while off blast, but they will also realize some cost savings for semiannual reporting due to efficiencies achieved once they adapt to the new electronic reporting system. We estimate the nationwide annual costs for Years 2 through 5 would be approximately \$32,500 per year or \$720 per year per major source foundry.

For the 390 area source foundries subject to 40 CFR part 63, subpart ZZZZZ, we estimate the total first year costs associated with the final electronic reporting and SSM revisions will be \$352,000 or approximately \$900 per area source foundry. This includes one-time costs to learn

the electronic reporting templates and set up recordkeeping systems to work with the electronic reporting and, for large area source foundries only, one-time costs to learn the electronic reporting system for submitting performance tests for those facilities that conducted a performance test. Because performance tests are required every 5 years, we expect a portion of the large area source foundries will continue to incur additional costs for reporting performance test results, since facilities reporting performance test results in Year 2, 3, 4, or 5 would be using that system for the first time. For Years 2 and on, all area source foundries will also realize some cost savings for semiannual reporting due to efficiencies achieved once facilities adapt to the new electronic reporting system. We estimate that all area source will realize a net cost savings for Years 2 and on and that the cumulative saving across all area source foundries would be \$67,400 per year or a savings of \$170 per year per area source foundry.

*D. What are the economic impacts?*

Economic impact analyses focus on changes in market prices and output levels. If changes in market prices and output levels in the primary markets are significant enough, impacts on other markets may also be examined. Both the magnitude of costs needed to comply with a final rule and the distribution of these costs among affected facilities can have a role in determining how the market will change in response to a final rule. Because the costs associated with the final revisions are minimal, no significant economic impacts are anticipated as a result of the final amendments.

*E. What are the benefits?*

The final amendments will result in improvements to the rule. Specifically, the final amendments revise the standards to reflect that they apply at all times. Additionally, the final amendments requiring electronic submittal of initial notifications, performance test results, and

semiannual reports will increase the usefulness of the data, are in keeping with current trends of data availability, will further assist in the protection of public health and the environment, and will ultimately result in less burden on the regulated community. The final technical and editorial corrections improve the clarity of the rule.

*F. What analysis of environmental justice did we conduct?*

Executive Order 12898 (59 FR 7629, February 16, 1994) establishes Federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

To examine the potential for any environmental justice issues that might be associated with the source category, we performed a demographic analysis, which is an assessment of risks to individual demographic groups of the populations living within 5 kilometers (km) and within 50 km of the facilities. In the analysis, we evaluated the distribution of HAP-related cancer and noncancer risks from the major source Iron and Steel Foundries source category across different demographic groups within the populations living near facilities.<sup>15</sup>

The results of the major source Iron and Steel Foundries source category demographic analysis indicate that emissions from the source category expose approximately 144,000 people

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<sup>15</sup> 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 2 times the poverty level, and linguistically isolated people.

to a cancer risk at or above 1-in-1 million and zero people to a chronic noncancer hazard index greater than or equal to 1. The African American population exposed to a cancer risk at or above 1-in-1 million due to iron and steel foundries emissions is 4 percent above the national average. Likewise, populations living “Below Poverty Level” and “Over 25 and without High School Diploma” are exposed to cancer risk above 1-in-1 million, 6 and 4 percent above the national average, respectively. The percentages of the at-risk population in other demographic groups are similar to or lower than their respective nationwide percentages. The methodology and the results of the demographic analysis are presented in a technical report, *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Iron and Steel Foundries*, available as Docket Item No. EPA-HQ-OAR-2019-0373-0020.

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

The EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. The health risk assessments for this action are contained in the document titled *Residual Risk Assessment for the Iron and Steel Foundries Major Source Category in Support of the 2020 Risk and Technology Review Final Rule*, available in the docket (Docket ID No. EPA-HQ-OAR-2019-0373).

## **VI. Statutory and Executive Order Reviews**

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

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

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

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

This action is not an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

## *C. Paperwork Reduction Act (PRA)*

The information collection activities in this final rule have been submitted for approval to OMB under the PRA.

### 1. Iron and Steel Foundries Major Sources

The information collection request (ICR) document that the EPA prepared has been assigned EPA ICR number 2096.09. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here. The information collection requirements are not enforceable until OMB approves them.

We are finalizing amendments that require electronic reporting, remove the malfunction exemption, and impose other revisions that affect reporting and recordkeeping for iron and steel foundries major source facilities. This information will be collected to assure compliance with 40 CFR part 63, subpart EEEEE.

*Respondents/affected entities:* Owners or operators of iron and steel foundries major source facilities.

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

*Estimated number of respondents:* 45 (total).

*Frequency of response:* Initial, semiannual, and annual.

*Total estimated burden:* The annual recordkeeping and reporting burden for facilities to comply with all of the requirements in the NESHAP is estimated to be 15,400 hours (per year). Burden is defined at 5 CFR 1320.3(b).

*Total estimated cost:* The annual recordkeeping and reporting burden for facilities to comply with all of the requirements in the NESHAP is estimated to be \$1,440,000 (per year), which includes \$206,000 annualized capital or O&M costs.

## 2. Iron and Steel Foundries Area Sources

The ICR document that the EPA prepared has been assigned EPA ICR number 2267.07. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here. The information collection requirements are not enforceable until OMB approves them.

We are finalizing amendments that require electronic reporting, remove the malfunction exemption, and impose other revisions that affect reporting and recordkeeping for iron and steel foundries area source facilities. This information will be collected to assure compliance with 40 CFR part 63, subpart ZZZZZ.

*Respondents/affected entities:* Owners or operators of iron and steel foundries area source facilities.

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

*Estimated number of respondents:* 390 (total), 75 of these are classified as large iron and steel foundries and 315 are classified as small iron and steel foundries.

*Frequency of response:* Initial, semiannual, and annual.

*Total estimated burden:* The annual recordkeeping and reporting burden for facilities to comply with all of the requirements in the NESHAP is estimated to be 14,400 hours (per year). Burden is defined at 5 CFR 1320.3(b).

*Total estimated cost:* The annual recordkeeping and reporting burden for facilities to comply with all of the requirements in the NESHAP is estimated to be \$1,150,000 (per year); there are no annualized capital or O&M costs.

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. When OMB approves this ICR, the Agency will announce that approval in the *Federal Register* and publish a technical amendment to 40 CFR part 9 to display the OMB control number for the approved information collection activities contained in this final rule.

*D. Regulatory Flexibility Act (RFA)*

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden or otherwise has a positive economic effect on the small entities subject to the rule. The final amendments have a very limited one-time burden as affected facilities implement electronic reporting for the first time, but affected facilities will see a net cost savings in subsequent years that will off-set the initial one-time costs within the first 3 years after implementation. We have, therefore, concluded that this action will have no net regulatory burden for all directly regulated small entities.

*E. 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.

*F. Executive Order 13132: Federalism*

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

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

This action does not have tribal implications as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, on the relationship between the Federal Government and Indian Tribes, or on the distribution of power and responsibilities between the Federal Government and Indian Tribes. No tribal governments own facilities subject to the NESHAP. Thus, Executive Order 13175 does not apply to this action.

*H. 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 sections III.A and IV.A of this preamble. Further documentation is provided in the following risk report titled *Residual Risk Assessment for the Iron and Steel Foundries Major Source Category in Support of the 2020 Risk and Technology Review Final Rule*, which can be found in the docket for this action.

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

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

*J. National Technology Transfer and Advancement Act (NTTAA)*

This rulemaking does not involve technical standards.

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

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994).

The documentation for this decision is contained in the technical report titled *Risk and Technology Review – Analysis of Demographic Factors for Populations Living Near Iron and Steel Foundries*, available as Docket Item No. EPA-HQ-OAR-2019-0373-0020.

*L. Congressional Review Act (CRA)*

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a “major rule” as defined by 5 U.S.C. 804(2).

**List of Subjects in 40 CFR Part 63**

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Incorporation by reference, Intergovernmental relations, Reporting and recordkeeping requirements.

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**Andrew Wheeler,**

*Administrator.*

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

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

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

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

**Subpart EEEEE—National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries**

2. Section 63.7690 is amended by revising paragraph (a)(8) to read as follows:

**§63.7690 What emissions limitations must I meet?**

(a) \* \* \*

(8) For each cupola metal melting furnace at a new or existing iron and steel foundry, you must not discharge emissions of volatile organic hazardous air pollutants (VOHAP) through a conveyance to the atmosphere that exceed 20 parts per million by volume (ppmv) corrected to 10-percent oxygen while on blast.

\* \* \* \* \*

3. Section 63.7700 is amended by adding paragraph (g) to read as follows:

**§63.7700 What work practice standards must I meet?**

\* \* \* \* \*

(g) For each cupola at a new or existing iron and steel foundry, you must reduce VOHAP emissions to the extent practicable during periods of off blast, as defined in §63.7765, by meeting the applicable requirements in paragraph (g)(1) or (2) of this section.

(1) On and before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must comply with the requirements in §63.7710 and the requirements specified in the startup, shutdown, and malfunction plan required at §63.7720(c).

(2) After **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must comply with the applicable requirements in paragraphs (g)(2)(i) through (iii) of this section.

(i) Except as provided in paragraphs (g)(2)(ii) and (iii) of this section, you must operate an afterburner or other thermal combustion control device with a flame present at all times while the cupola is off blast. This includes the latter portion of coke bed preparation step and the initial metallics charging step during cupola startup, the slag and residual metal removal step during cupola shutdown, and idling conditions when the blast air is turned off or down to the point that the cupola does not produce additional molten metal.

(ii) During cupola startup steps of refractory curing and cupola bed preparation and during the cupola shutdown steps of cupola cooling and banking or bottom drop, you must comply with the requirements in §63.7710 and the opacity limit in §63.7690(a)(7).

(iii) You must light the cupola afterburner or other thermal combustion control device as soon as practicable during the cupola startup step of coke bed preparation following the procedures included in the operation and maintenance plan required at §63.7710(b), but no later than 30 minutes after the blast air is started to begin the coke bed burn-in.

4. Section 63.7710 is amended by revising paragraphs (a) and (b) introductory text to read as follows:

**§63.7710 What are my operation and maintenance requirements?**

(a) You must always operate and maintain your iron and steel foundry, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture and collection system and control device for an emissions source subject to a PM, metal HAP, TEA, or VOHAP emissions limit in §63.7690(a) or the work practice standards in §63.7700(g). Your operation and maintenance plan also must include procedures for igniting gases from mold vents in pouring areas and pouring stations that use a sand mold system. This operation and maintenance plan is subject to approval by the Administrator. Each plan must contain the elements described in paragraphs (b)(1) through (6) of this section.

\* \* \* \* \*

5. Section 63.7720 is amended by revising paragraphs (a) and (c) to read as follows:

**§63.7720 What are my general requirements for complying with this subpart?**

(a) On and before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for affected sources that commenced construction or reconstruction on or before **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup and shutdown. After **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for affected sources that commenced construction or reconstruction on or before **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, and upon startup for affected sources that commenced construction or

reconstruction after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times.

\* \* \* \* \*

(c) On and before **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for affected sources that commenced construction or reconstruction on or before **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The startup, shutdown, and malfunction plan also must specify what constitutes a shutdown of a cupola and how to determine that operating conditions are normal following startup of a cupola. After **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, for affected sources that commenced construction or reconstruction on or before **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, and upon startup for affected sources that commenced construction or reconstruction after **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, the startup, shutdown, and malfunction plan requirements no longer apply.

6. Section 63.7732 is amended by revising paragraphs (a) and (e)(1) introductory text to read as follows:

**§63.7732 What test methods and other procedures must I use to demonstrate initial compliance with the emissions limitations?**

(a) You must conduct each performance test that applies to your iron and steel foundry based on your selected compliance alternative, if applicable, according to the requirements in paragraphs (b) through (i) of this section. Each performance test must be conducted under

conditions representative of normal operations. Normal operating conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. 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. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

\* \* \* \* \*

(e) \* \* \*

(1) Determine the VOHAP concentration for each test run according to the test methods in 40 CFR part 60, appendix A, that are specified in paragraphs (e)(1)(i) through (v) of this section.

\* \* \* \* \*

7. Section 63.7740 is amended by revising paragraph (e) to read as follows:

**§63.7740 What are my monitoring requirements?**

\* \* \* \* \*

(e) For each combustion device subject to the operating limit in §63.7690(b)(3) or the work practice standard in §63.7700(g)(2)(i), you must at all times monitor the 15-minute average combustion zone temperature using a CPMS according to the requirements of §63.7741(d).

\* \* \* \* \*

8. Section 63.7741 is amended by revising paragraph (d) introductory text to read as follows:

**§63.7741 What are the installation, operation, and maintenance requirements for my monitors?**

\* \* \* \* \*

(d) For each combustion device subject to the operating limit in §63.7690(b)(3) or (4) or the work practice standard in §63.7700(g)(2)(i), you must install and maintain a CPMS to measure and record the combustion zone temperature according to the requirements in paragraphs (d)(1) through (8) of this section.

\* \* \* \* \*

9. Section 63.7744 is amended by adding paragraph (e) to read as follows:

**§63.7744 How do I demonstrate continuous compliance with the work practice standards that apply to me?**

\* \* \* \* \*

(e) For each cupola furnace at a new or existing iron and steel foundry in off blast, you must keep daily records to document the relevant times of off blast, in conjunction with the requirements to monitor and record the combustion zone temperature for the cupola's thermal combustion control device as required in §§63.7740(e) and 63.7741(d), to demonstrate continuous compliance with the requirements in §63.7700(g). The relevant times of off blast include: the time blast air is started to begin the coke bed burn-in, the time the cupola afterburner or other thermal combustion device is lit, and the time metal production starts during cupola startup; the time when metal production ends, the time slag removal is completed, and the time the afterburner or other thermal combustion device is turned off during cupola shutdown; and the times idling starts and stops.

**§63.7746 [Amended]**

10. Section 63.7746 is amended by removing and reserving paragraph (b).

11. Section 63.7751 is amended by:

- a. In paragraph (a) introductory text, removing “Compliance report due dates” and adding “*Compliance report due dates*” in its place;
- b. In paragraph (b) introductory text, removing “Compliance report contents” and adding “*Compliance report contents*” in its place;
- c. Removing and reserving paragraph (b)(4);
- d. Revising paragraphs (b)(6) through (8);
- e. Removing and reserving paragraph (c);
- f. In paragraph (d), removing “Part 70 monitoring report” and adding “*Part 70 monitoring report*” in its place; and
- g. Adding paragraphs (e) through (i).

The revisions and additions read as follows:

**§63.7751 What reports must I submit and when?**

\* \* \* \* \*

(b) \* \* \*

(6) If there were no periods during which a continuous monitoring system (including a CPMS or CEMS) was inoperable or out-of-control as specified by §63.8(c)(7), a statement that there were no periods during which the CPMS was inoperable or out-of-control during the reporting period.

(7) For each affected source or equipment for which there was a deviation from an emissions limitation (including an operating limit, work practice standard, or operation and maintenance requirement) that occurs at an iron and steel foundry during the reporting period, the compliance report must contain the information specified in paragraphs (b)(7)(i) through (iii)

of this section. The requirement in this paragraph (b)(7) includes periods of startup, shutdown, and malfunction.

(i) A list of the affected source or equipment and the total operating time of each emissions source during the reporting period.

(ii) For each deviation from an emissions limitation (including an operating limit, work practice standard, or operation and maintenance requirement) that occurs at an iron and steel foundry during the reporting period, report:

(A) The date, start time, duration (in hours), and cause of each deviation (characterized as either startup, shutdown, control equipment problem, process problem, other known cause, or unknown cause, as applicable) and the corrective action taken; and

(B) An estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.

(iii) A summary of the total duration (in hours) of the deviations that occurred during the reporting period by cause (characterized as startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes) and the cumulative duration of deviations during the reporting period across all causes both in hours and as a percent of the total source operating time during the reporting period.

(8) For each continuous monitoring system (including a CPMS or CEMS) used to comply with the emissions limitation or work practice standard in this subpart that was inoperable or out-of-control during any portion of the reporting period, you must include the information specified in paragraphs (b)(8)(i) through (vi) of this section. The requirement in this paragraph (b)(8) includes periods of startup, shutdown, and malfunction.

(i) A brief description of the continuous monitoring system, including manufacturer and model number.

(ii) The date of the latest continuous monitoring system certification or audit.

(iii) A brief description and the total operating time of the affected source or equipment that is monitored by the continuous monitoring system during the reporting period.

(iv) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(v) For each period for which the continuous monitoring system was inoperable or out-of-control during the reporting period, report:

(A) The date, start time, and duration (in hours) of the deviation;

(B) The type of deviation (inoperable or out-of-control); and

(C) The cause of deviation (characterized as monitoring system malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and unknown causes, as applicable) and the corrective action taken.

(vi) A summary of the total duration (in hours) of the deviations that occurred during the reporting period by cause (characterized as monitoring system malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and unknown causes) and the cumulative duration of deviations during the reporting period across all causes both in hours and as a percent of the total source operating time during the reporting period.

\* \* \* \* \*

(e) *Compliance report submission requirements.* Prior to **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must submit

semiannual compliance reports to the Administrator as specified in §63.13. Beginning on **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must submit all subsequent semiannual compliance reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (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 confidential business information (CBI). Anything submitted using CEDRI cannot later be claimed to be CBI. You must use the appropriate electronic report template on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/cedri>) for this subpart. The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. If you claim some of the information required to be submitted via CEDRI is CBI, submit a complete report, including information claimed to be CBI, to the EPA. The report must be generated using the appropriate form on the CEDRI website or an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI website. Although we do not expect persons to assert a claim of CBI, if persons wish to assert a CBI, 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 earlier in this paragraph (e). 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 requires

EPA to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(f) *Performance test results submission requirements.* 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 (f)(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 CEDRI, which can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the 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.* 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 to be CBI. Although we do not expect persons to assert a claim of CBI, if you claim some of the information submitted under paragraph (f)(1) or (2) of this section is CBI, you must submit a

complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of 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 paragraph (f)(1) 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 requires EPA to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

*(g) Performance evaluation results submission requirements.* Within 60 days after the date of completing each continuous monitoring system (CMS) performance evaluation (as defined in §63.2), you must submit the results of the performance evaluation following the procedures specified in paragraphs (g)(1) through (3) of this section.

*(1) Performance evaluations of CMS 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 through the use of 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 CMS 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) *Confidential business information.* 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 to be CBI. Although we do not expect persons to assert a claim of CBI, if you claim some of the information submitted under paragraph (g)(1) or (2) of this section is CBI, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of 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 paragraph (g)(1) 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 requires EPA to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(h) *Claims of EPA system outage.* 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 the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (h)(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) 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.

(i) *Claims of force majeure.* 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 the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (i)(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) 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.

12. Section 63.7752 is amended by:

- a. Revising paragraph (a)(2);
- b. Revising paragraphs (b)(2) and (4); and
- c. Adding paragraphs (d) and (e).

The revisions and additions read as follows:

**§63.7752 What records must I keep?**

(a) \* \* \*

(2) Records of required maintenance performed on the air pollution control and monitoring equipment as required by §63.10(b)(2)(iii).

\* \* \* \* \*

(b) \* \* \*

(2) Records of the site-specific performance evaluation test plan required under §63.8(d)(2) 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 is revised, you shall 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 as required under §63.8(d)(2)(vi).

\* \* \* \* \*

(4) Records of the date and time that each deviation started and stopped.

\* \* \* \* \*

(d) You must keep the following records for each failure to meet an emissions limitation (including operating limit), work practice standard, or operation and maintenance requirement in this subpart.

(1) Date, start time, and duration of each failure.

(2) List of the affected sources or equipment for each failure, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.

(3) Actions taken to minimize emissions in accordance with §63.7710(a), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(e) Any records required to be maintained by this part that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

13. Section 63.7761 is amended by revising paragraph (c) introductory text and adding paragraph (c)(5) to read as follows:

**§63.7761 Who implements and enforces this subpart?**

\* \* \* \* \*

(c) The authorities that cannot be delegated to state, local, or tribal agencies are 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.

14. Section 63.7765 is amended by adding in alphabetical order the definitions for “Cupola shutdown” and “Cupola startup” and revising the definitions for “Deviation” (including the undesignated paragraph following the definition) and “Off blast” to read as follows:

**§63.7765 What definitions apply to this subpart?**

\* \* \* \* \*

*Cupola shutdown* means the period beginning when the last of the molten metal is tapped from the cupola’s primary tap hole and ending when the cupola is cooled and the cupola is either banked or the bottom contents are removed (“bottom drop”). *Cupola shutdown* includes the following steps: slag and residual metal removal from secondary tap; cupola cooling; and cupola banking or bottom drop.

*Cupola startup* means the commencement of activities needed to take a banked cupola or a cupola that has had the bottom dropped back into melt production. *Cupola startup* includes the following steps: refractory curing, if needed; cupola bed preparation (during which the sand bed is preheated), if needed; coke bed preparation (during which coke is added to the cupola and lit); and initial metallics charging.

*Deviation* means any instance in which an affected source or an owner or operator of such an affected source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emissions limitation (including operating limits), work practice standard, or operation and maintenance requirement; or

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any iron and steel foundry required to obtain such a permit.

(3) A deviation is not always a violation. The determination of whether a deviation constitutes a violation of the standard is up to the discretion of the entity responsible for enforcement of the standards.

\* \* \* \* \*

*Off blast* means those periods of cupola operation when the cupola is not actively being used to produce molten metal. *Off blast* conditions include cupola startup and cupola shutdown. *Off blast* conditions also include idling conditions when the blast air is turned off or down to the point that the cupola does not produce additional molten metal.

\* \* \* \* \*

15. Table 1 to subpart EEEEE of part 63 is revised to read as follows:

**Table 1 to Subpart EEEEE of Part 63—Applicability of General Provisions to This Subpart**

[As stated in §63.7760, you must meet each requirement in the following table that applies to you.]

Citation	Subject	Applies to This Subpart?	Explanation
63.1	Applicability	Yes	
63.2	Definitions	Yes	
63.3	Units and abbreviations	Yes	
63.4	Prohibited activities	Yes	
63.5	Construction/reconstruction	Yes	
63.6(a) through (d)	Compliance applicability and dates	Yes	
63.6(e)	Operating and maintenance requirements	No	This subpart specifies operating and maintenance requirements.
63.6(f)(1)	Applicability of non-opacity emission standards	No	This subpart specifies applicability of non-

			opacity emission standards.
63.6(f)(2) through (3)	Methods and finding of compliance with non-opacity emission standards	Yes	
63.6(g)	Use of an alternative nonopacity emission standard	Yes	
63.6(h)(1)	Applicability of opacity and visible emissions standards	No	This subpart specifies applicability of opacity and visible emission standards.
63.6(h)(2) through (9)	Methods and other requirements for opacity and visible emissions standards	Yes	
63.6(i) through (j)	Compliance extension and Presidential compliance exemption	Yes	
63.7(a)(1) through (2)	Applicability and performance test dates	No	This subpart specifies applicability and performance test dates.
63.7(a)(3) through (4)	Administrators rights to require a performance test and force majeure provisions	Yes	
63.7(b) through (d)	Notification of performance test, quality assurance program, and testing facilities	Yes	
63.7(e)(1)	Performance test conditions	No	This subpart specifies performance test conditions.
63.7(e)(2) through (4), (f) through (h)	Other performance testing requirements	Yes	
63.8(a)(1) through (3), (b), (c)(1)(ii), (c)(2) through (3), (c)(6) through (8), (d)(1) through (2)	Monitoring requirements	Yes	
63.8(a)(4)	Additional monitoring requirements for control devices in §63.11	No	This subpart does not require flares.

63.8(c)(1)(i), (c)(1)(iii)	Operation and maintenance of continuous monitoring systems	No	Not necessary in light of other requirements of § 63.8 that apply.
63.8(c)(4)	CMS requirements	No	This subpart specifies requirements for operation of CMS and CEMS.
63.8(c)(5)	Continuous opacity monitoring system (COMS) Minimum Procedures	No	This subpart does not require COMS.
63.8(d)(3)	Quality control program	No.	This subpart specifies records that must be kept associated with site-specific performance evaluation test plan.
63.8(e), (f)(1) through (6), (g)(1) through (4)	Performance evaluations and alternative monitoring	Yes	This subpart specifies requirements for alternative monitoring systems.
63.8(g)(5)	Data reduction	No	This subpart specifies data reduction requirements.
63.9	Notification requirements	Yes	Except: for opacity performance tests, this subpart allows the notification of compliance status to be submitted with the semiannual compliance report or the semiannual part 70 of this chapter monitoring report.
63.10(a),(b)(1), (b)(2)(iii) and (vi) through (xiv), (b)(3), (c)(1) through (6), (c)(9) through (14), (d)(1) through (4), (e)(1) through (2), (f)	Recordkeeping and reporting requirements	Yes	Additional records for CMS in §63.10(c)(1)-(6), (9)-(15) apply only to CEMS.
63.10(b)(2)(i), (ii), (iv) and (v)	Recordkeeping for startup, shutdown, and malfunction events	No	
63.10(c)(7), (8) and (15)	Records of excess emissions and parameter monitoring exceedances for CMS	No	This subpart specifies records requirements.

63.10(d)(5)	Periodic startup, shutdown, and malfunction reports	No	
63.10(e)(3)	Excess emissions reports	No	This subpart specifies reporting requirements.
63.10(e)(4)	Reporting COMS data	No	This subpart data does not require COMS.
63.11	Control device requirements	No	This subpart does not require flares.
63.12	State authority and delegations	Yes	
63.13(a)	Reporting to EPA regional offices	Yes.	Except: reports and notifications required to be submitted to CEDRI meet this obligation through electronic reporting.
63.13(b) through 63.15	Addresses of state air pollution control agencies. Incorporation by reference. Availability of information and confidentiality	Yes	

**Subpart ZZZZZ—National Emission Standards for Hazardous Air Pollutants for Iron and Steel Foundries Area Sources**

16. Section 63.10885 is amended by revising paragraph (a)(1) to read as follows:

**§63.10885 What are my management practices for metallic scrap and mercury switches?**

(a) \* \* \*

(1) *Restricted metallic scrap.* You must prepare and operate at all times according to written material specifications for the purchase and use of only metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, post-consumer oil filters, oily turnings, lead components, chlorinated plastics, or free liquids. For the purpose of this subpart, “free liquids” is defined as material that fails the paint filter test by EPA Method 9095B, “Paint Filter Liquids Test” (revision 2), November 2004 (incorporated by reference—see §63.14). The requirements for no free liquids do not apply if the

owner or operator can demonstrate that the free liquid is water that resulted from scrap exposure to rain. Any post-consumer engine blocks, post-consumer oil filters, or oily turnings that are processed and/or cleaned to the extent practicable such that the materials do not include lead components, mercury switches, chlorinated plastics, or free organic liquids can be included in this certification.

\* \* \* \* \*

17. Section 63.10890 is amended by revising paragraphs (c) introductory text, (d), (e)(3), (f), and (i) and adding paragraph (j) to read as follows:

**§63.10890 What are my management practices and compliance requirements?**

\* \* \* \* \*

(c) You must submit a notification of compliance status according to §63.9(h)(2)(i). You must send the notification of compliance status before the close of business on the 30th day after the applicable compliance date specified in §63.10881. The notification must include the following compliance certifications, as applicable:

\* \* \* \* \*

(d) As required by §63.10(b)(1), you must maintain files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche. Any records required to be maintained by this part that are submitted electronically via the EPA's Compliance and Emissions Data Reporting Interface (CEDRI) may be maintained in electronic format. This ability to maintain electronic copies does

not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

(e) \* \* \*

(3) If you are subject to the requirements for a site-specific plan for mercury switch removal under §63.10885(b)(1), you must maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered.

\* \* \* \* \*

(f) You must submit semiannual compliance reports to the Administrator according to the requirements in §63.10899(c), (f), and (g), except that §63.10899(c)(5) and (7) do not apply.

\* \* \* \* \*

(i) 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.

(j) You must comply with the following requirements of the general provisions in subpart A of this part: §§63.1 through 63.5; §63.6(a), (b), and (c); §63.9; §63.10(a), (b)(1), (b)(2)(xiv), (b)(3), (d)(1) and (4), and (f); and §§63.13 through 63.16. Requirements of the general provisions not cited in the preceding sentence do not apply to the owner or operator of a new or existing affected source that is classified as a small foundry.

18. Section 63.10896 is amended by adding paragraph (c) to read as follows:

**§63.10896 What are my operation and maintenance requirements?**

\* \* \* \* \*

(c) 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.

19. Section 63.10897 is amended by revising paragraphs (d)(1)(i), (d)(3) introductory text, and (g) to read as follows:

**§63.10897 What are my monitoring requirements?**

\* \* \* \* \*

(d) \* \* \*

(1) \* \* \*

(i) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

\* \* \* \* \*

(3) In the event that a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete corrective action as soon as practicable, but no later than 10 calendar days from the date of the alarm. You must record the date and time of each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed.

Corrective actions may include, but are not limited to:

\* \* \* \* \*

(g) In the event of an exceedance of an established emissions limitation (including an operating limit), you must restore operation of the emissions source (including the control device

and associated capture system) to its normal or usual manner or operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the exceedance. You must record the date and time corrective action was initiated, the corrective action taken, and the date corrective action was completed.

\* \* \* \* \*

20. Section 63.10898 is amended by revising paragraph (c) to read as follows:

**§63.10898 What are my performance test requirements?**

\* \* \* \* \*

(c) You must conduct each performance test under conditions representative of normal operations according to the requirements in Table 1 to this subpart and paragraphs (d) through (g) of this section. Normal operating conditions exclude periods of startup and shutdown. You may not conduct performance tests during periods of malfunction. 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. Upon request, you shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

\* \* \* \* \*

21. Section 63.10899 is amended is amended by:

- a. Revising paragraphs (a), (b) introductory text, and (b)(2);
- b. Adding paragraphs (b)(14) and (15);
- c. Revising paragraph (c); and

d. Adding paragraphs (e) through (g).

The revisions and additions read as follows:

**§63.10899 What are my recordkeeping and reporting requirements?**

(a) As required by §63.10(b)(1), you must maintain files of all information (including all reports and notifications) for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks or flash drives, on magnetic tape disks, or on microfiche. Any records required to be maintained by this part that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.

(b) In addition to the records required by §63.10(b)(2)(iii) and (vi) through (xiv) and (b)(3), you must keep records of the information specified in paragraphs (b)(1) through (15) of this section.

\* \* \* \* \*

(2) If you are subject to the requirements for a site-specific plan for mercury under §63.10885(b)(1), you must maintain records of the number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, and an estimate of the percent of mercury switches recovered.

\* \* \* \* \*

(14) You must keep records of the site-specific performance evaluation test plan required under §63.8(d)(2) 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 is revised, you shall 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 as required under §63.8(d)(2)(vi).

(15) You must keep the following records for each failure to meet an emissions limitation (including operating limit), work practice standard, or operation and maintenance requirement in this subpart.

(i) Date, start time, and duration of each failure.

(ii) List of the affected sources or equipment for each failure, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.

(iii) Actions taken to minimize emissions in accordance with §63.10896(c), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.

(c) Prior to **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must submit semiannual compliance reports to the Administrator according to the requirements in §63.13. Beginning on **[INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, you must submit all subsequent semiannual compliance reports to the EPA via the CEDRI, which can be accessed through the EPA's Central Data Exchange (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 confidential business information (CBI). Anything submitted using CEDRI cannot later be claimed to be CBI. You must use the appropriate electronic report template on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/cedri>) for this subpart. The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. Although we do not expect persons to assert a claim of CBI, if persons wish to assert a CBI if you claim some of the information required to be submitted via CEDRI is CBI, submit a complete report, including information claimed to be CBI, to the EPA. The report must be generated using the appropriate form on the CEDRI website or an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI 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 earlier in this paragraph (c). 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 requires EPA to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. The reports must include the information specified in paragraphs (c)(1) through (3) of this section and, as applicable, paragraphs (c)(4) through (9) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If there were no deviations from any emissions limitations (including operating limits, pollution prevention management practices, or operation and maintenance requirements), a statement that there were no deviations from the emissions limitations, pollution prevention management practices, or operation and maintenance requirements during the reporting period.

(5) If there were no periods during which a continuous monitoring system (including a CPMS or continuous emissions monitoring system (CEMS) was inoperable or out-of-control as specified by §63.8(c)(7), a statement that there were no periods during which the CPMS was inoperable or out-of-control during the reporting period.

(6) For each affected source or equipment for which there was a deviation from an emissions limitation (including an operating limit, pollution prevention management practice, or operation and maintenance requirement) that occurs at an iron and steel foundry during the reporting period, the compliance report must contain the information specified in paragraphs (c)(6)(i) through (iii) of this section. The requirement in this paragraph (c)(6) includes periods of startup, shutdown, and malfunction.

(i) A list of the affected source or equipment and the total operating time of each emissions source during the reporting period.

(ii) For each deviation from an emissions limitation (including an operating limit, pollution prevention management practice, or operation and maintenance requirement) that occurs at an iron and steel foundry during the reporting period, report:

(A) The date, start time, duration (in hours), and cause of each deviation (characterized as either startup, shutdown, control equipment problem, process problem, other known cause, or unknown cause, as applicable) and the corrective action taken; and

(B) An estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.

(iii) A summary of the total duration (in hours) of the deviations that occurred during the reporting period by cause (characterized as startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes) and the cumulative duration of deviations during the reporting period across all causes both in hours and as a percent of the total source operating time during the reporting period.

(7) For each continuous monitoring system (including a CPMS or CEMS) used to comply with the emissions limitation or work practice standard in this subpart that was inoperable or out-of-control during any portion of the reporting period, you must include the information specified in paragraphs (c)(7)(i) through (vi) of this section. The requirement in this paragraph (c)(7) includes periods of startup, shutdown, and malfunction.

(i) A brief description of the continuous monitoring system, including manufacturer and model number.

(ii) The date of the latest continuous monitoring system certification or audit.

(iii) A brief description and the total operating time of the affected source or equipment that is monitored by the continuous monitoring system during the reporting period.

(iv) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(v) For each period for which the continuous monitoring system was inoperable or out-of-control during the reporting period, report:

(A) The date, start time, and duration (in hours) of the deviation;

(B) The type of deviation (inoperable or out-of-control); and

(C) The cause of deviation (characterized as monitoring system malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and unknown causes, as applicable) and the corrective action taken.

(vi) A summary of the total duration (in hours) of the deviations that occurred during the reporting period by cause (characterized as monitoring system malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and unknown causes) and the cumulative duration of deviations during the reporting period across all causes both in hours and as a percent of the total source operating time during the reporting period.

(8) Identification of which option in §63.10885(b) applies to you. If you comply with the mercury requirements in §63.10885(b) by using one scrap provider, contract, or shipment subject to one compliance provision and others subject to another compliance provision different, provide an identification of which option in §63.10885(b) applies to each scrap provider, contract, or shipment.

(9) If you are subject to the requirements for a site-specific plan for mercury under §63.10885(b)(1), include:

(i) The number of mercury switches removed or the weight of mercury recovered from the switches and properly managed, the estimated number of vehicles processed, an estimate of the percent of mercury switches recovered;

(ii) A certification that the recovered mercury switches were recycled at RCRA-permitted facilities; and

(iii) A certification that you have conducted periodic inspections or taken other means of corroboration as required under §63.10885(b)(1)(ii)(C).

\* \* \* \* \*

(e) 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 (e)(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 CEDRI, which can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the 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.* 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

to be CBI. Although we do not expect persons to assert a claim of CBI if you claim some of the information submitted under paragraph (e)(1) or (2) of this section is CBI, you must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of 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 paragraph (e)(1) 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 requires EPA to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(f) 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 the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (f)(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 5 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) 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.

(g) 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 the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (g)(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) 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.

22. Section 63.10905 is amended by revising paragraph (c) introductory text and adding paragraph (c)(7) to read as follows:

**§63.10905 Who implements and enforces this subpart?**

\* \* \* \* \*

(c) The authorities that cannot be delegated to state, local, or tribal agencies are specified in paragraphs (c)(1) through (7) of this section.

\* \* \* \* \*

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

23. Section 63.10906 is amended by revising the definition for “Deviation” to read as follows:

**§63.10906 What definitions apply to this subpart?**

\* \* \* \* \*

*Deviation* means any instance in which an affected source or an owner or operator of such an affected source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emissions limitation (including operating limits), management practice, or operation and maintenance requirement; or

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any iron and steel foundry required to obtain such a permit.

\* \* \* \* \*

24. Table 3 to subpart ZZZZZ of part 63 is revised to read as follows:

**Table 3 to Subpart ZZZZZ of Part 63—Applicability of General Provisions to New and Existing Affected Sources Classified as Large Foundries**

As required in §63.10900(a), you must meet each requirement in the following table that applies to you:

<b>Citation</b>	<b>Subject</b>	<b>Applies to large foundry?</b>	<b>Explanation</b>
63.1	Applicability	Yes.	
63.2	Definitions	Yes.	
63.3	Units and abbreviations	Yes.	

63.4	Prohibited activities	Yes.	
63.5	Construction/reconstruction	Yes.	
63.6(a) through (d)	Compliance applicability and dates	Yes.	
63.6(e)	Operating and maintenance requirements	No.	This subpart specifies operating and maintenance requirements.
63.6(f)(1)	Applicability of non-opacity emission standards	No.	This subpart specifies applicability of non-opacity emission standards.
63.6(f)(2) through (3)	Methods and finding of compliance with non-opacity emission standards	Yes.	
63.6(g)	Use of an alternative nonopacity emission standard	Yes.	
63.6(h)(1)	Applicability of opacity and visible emissions standards	No.	This subpart specifies applicability of opacity and visible emission standards
63.6(h)(2) through (9)	Methods and other requirements for opacity and visible emissions standards	Yes.	
63.6(i) through (j)	Compliance extension and Presidential compliance exemption	Yes.	
63.7(a)(1) through (2)	Applicability and performance test dates	No.	This subpart specifies applicability and performance test dates.
63.7(a)(3) through (4)	Administrators rights to require a performance test and force majeure provisions	Yes.	
63.7(b) through (d)	Notification of performance test, quality assurance program, and testing facilities	Yes.	
63.7(e)(1)	Performance test conditions	No.	This subpart specifies performance test conditions.

63.7(e)(2) through (4), (f) through (h)	Other performance testing requirements	Yes.	
63.8(a)(1) through (3), (b), (c)(1)(ii), (c)(2) through (3), (c)(6) through (8), (d)(1) through (2)	Monitoring requirements	Yes.	
63.8(a)(4)	Additional monitoring requirements for control devices in §63.11	No.	
63.8(c)(1)(i), (c)(1)(iii)	Operation and maintenance of continuous monitoring systems	No.	Not necessary in light of other requirements of § 63.8 that apply.
63.8(c)(4)	Continuous monitoring system (CMS) requirements	No.	
63.8(c)(5)	Continuous opacity monitoring system (COMS) minimum procedures	No.	
63.8(d)(3)	Quality control program	No.	This subpart specifies records that must be kept associated with site-specific performance evaluation test plan.
63.8(e), (f)(1) through (6), (g)(1) through (4)	Performance evaluations and alternative monitoring	Yes.	
63.8(g)(5)	Data reduction	No.	
63.9	Notification requirements	Yes.	Except for opacity performance tests.
63.10(a), (b)(1), (b)(2)(xii) through (xiv), (b)(3), (d)(1) through (4), (e)(1) through (2), (f)	Recordkeeping and reporting requirements	Yes.	
63.10(b)(2)(i) through (xi)	Malfunction and CMS records	No.	
63.10(c)	Additional records for CMS	No.	This subpart specifies records requirements.

63.10(d)(5)	Periodic startup, shutdown, and malfunction reports	No.	
63.10(e)(3)	Excess emissions reports	No.	This subpart specifies reporting requirements.
63.10(e)(4)	Reporting COMS data	No.	
63.11	Control device requirements	No.	
63.12	State authority and delegations	Yes.	
63.13(a)	Reporting to EPA regional offices	Yes.	Except: reports and notifications required to be submitted to CEDRI meet this obligation through electronic reporting.
63.13(b) through 63.16	Addresses of state air pollution control agencies. Incorporation by reference. Availability of information and confidentiality. Performance track provisions	Yes.	