## SUPPORTING STATEMENT ENVIRONMENTAL PROTECTION AGENCY

**NESHAP for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE) (Proposed Rule)** 

#### 1. Identification of the Information Collection

#### 1(a) Title of the Information Collection

NESHAP for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE) (Proposed Amendments), EPA ICR Number 2096.08, OMB Control Number 2060-0543.

#### 1(b) Short Characterization/Abstract

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE) were proposed on December 12, 2002, promulgated on April 22, 2004 and amended on May 20, 2005 and February 7, 2008. Amendments to the NESHAP are being proposed as a result of the residual risk and technology review (RTR) required under the Clean Air Act (CAA) (as discussed further below). These regulations apply to both existing and new iron and steel foundry facilities that are major sources of hazardous air pollutant (HAP) emissions. The rule applies to emissions from metal melting furnaces; scrap pre-heaters; pouring areas; pouring stations; automated conveyor and pallet cooling lines; automated shakeout lines; mold and core making lines; and to fugitive emissions from foundry operations. New facilities include those that commenced construction, modification, or reconstruction after the date of proposal. This information is being collected to assure compliance with 40 CFR Part 63, Subpart EEEEE.

In general, all NESHAP standards require initial notifications, performance tests, and periodic reports by the owners/operators of the affected facilities. They are also required to maintain records of the occurrence and duration of any failures to meet applicable standards, or any period during which the monitoring system is inoperative. Semiannual reporting of these deviations is also required. These notifications, reports, and records are essential in determining compliance, and are required of all affected facilities subject to NESHAP.

Any owner/operator subject to the provisions of this part shall maintain a file containing these records and retain the file for at least five years following the generation date of such maintenance reports and records. All reports are sent to the delegated state or local authority. In the event that there is no such delegated authority, the reports are sent directly to the U.S. Environmental Protection Agency (EPA) regional office.

The proposed RTR amendments to the rule eliminate the startup, shutdown, and malfunction (SSM) exemption; remove the SSM plan requirement; add electronic submittal of notifications, semiannual reports, and performance test reports; and make technical and editorial changes. The remaining portions of the NESHAP remain unchanged.

All of the iron and steel foundries in the United States are owned and operated by the iron and steel industry (the "Affected Public"). None of the facilities in the United States are owned

by either state, local, tribal or the Federal government. These are all privately-owned, for-profit businesses. The burden to the Affected Public may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE) (Proposed Amendments). The burden to the Federal Government is attributed entirely to work performed by either Federal employees or government contractors and may be found below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE) (Proposed Amendments).

The EPA estimated that there are currently 45 major source facilities subject to the standard. These estimates are based on the research conducted by the EPA during the 40 CFR part 63, Subpart EEEEE, RTR rulemaking and consultation with the industry. The EPA is not aware of any new major source foundries being constructed. Over the next three years, approximately 45 respondents per year will be subject to these standards, and no additional respondents per year will become subject to these same standards.

The Office of Management and Budget (OMB) approved the currently active Information Collection Request (ICR) without any "Terms of Clearance".

#### 2. Need for and Use of the Collection

## 2(a) Need/Authority for the Collection

Section 112 of the CAA requires the EPA to establish NESHAP for major sources of HAP that are listed for regulation under CAA section 112(c). A major source is a stationary source that emits or has the potential to emit more than 10 tons per year of any single HAP or more than 25 tons per year of any combination of HAP. For major sources, the NESHAP includes technology-based standards that must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). The NESHAP are commonly referred to as maximum achievable control technology (MACT) standards. In the Administrator's judgment, HAP emissions from Iron Foundries and Steel Foundries source categories cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, the NESHAP for the Iron and Steel Foundries were promulgated at 40 CFR Part 63, Subpart EEEEE in 2004.

Section 112(d)(6) of the CAA requires the EPA to review the technology-based MACT standards and revise them "as necessary (taking into account developments in practices, processes, and control technologies)" no less frequently than every 8 years. In addition, section 112(f) of the CAA requires the EPA to determine whether the MACT emissions limitations provide an ample margin of safety to protect public health. For MACT standards for HAP "classified as a known, probable, or possible human carcinogen" that "do not reduce lifetime excess cancer risks to the individual most exposed to emissions from a source in the category or subcategory to less than 1-in-1 million," the EPA must promulgate residual risk standards for the source category (or subcategory) as necessary to provide an ample margin of safety to protect public health. In doing so, the EPA may adopt standards equal to existing MACT standards, if

the EPA determines that the existing standards are sufficiently protective. The EPA must also adopt more stringent standards, if necessary, to prevent an adverse environmental effect, but must consider cost, energy, safety, and other relevant factors in doing so.

Certain records and reports are necessary for the Administrator to confirm the compliance status of sources subject to NESHAP, identify any new or reconstructed sources subject to the standards, and confirm that the standards are being achieved on a continuous basis. These recordkeeping and reporting requirements are specifically authorized by section 114 of the CAA (42 U.S.C. 7414) and set out in the part 63 NESHAP General Provisions (40 CFR Part 63, Subpart A). CAA Section 114(a) states that the Administrator may require any owner/operator subject to any requirement of this Act to:

(A) Establish and maintain such records; (B) make such reports; (C) install, use, and maintain such monitoring equipment, and use such audit procedures, or methods; (D) sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods, and in such manner as the Administrator shall prescribe); (E) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; (F) submit compliance certifications in accordance with Section 114(a)(3); and (G) provide such other information as the Administrator may reasonably require.

#### 2(b) Practical Utility/Users of the Data

The control of emissions of HAP from Iron and Steel Foundry facilities requires not only the installation of properly designed equipment, but also the operation and maintenance of that equipment. Emissions of HAP from these sources are the result of operation of the affected sources. The standards are achieved by the reduction of pollutant emissions using process changes and control technology.

The notifications required in the standards are used to inform the Agency or delegated authority when a source becomes subject to the requirements of the regulations. The reviewing authority may then inspect the source to check if the pollution control devices are properly installed and operated, leaks are being detected and repaired, and the standards are being met.

Performance tests are required in order to determine an affected facility's initial and ongoing capability to comply with the emission standards. During the performance test a record of the operating parameters under which compliance was achieved may be recorded and used to determine ongoing compliance. Continuous monitoring systems (either continuous emission monitors or continuous parameter monitors) are used to ensure compliance with the standards at all times. The required semiannual reports are used to determine periods of excess emissions, identify problems at the facility, verify operation/maintenance procedures and for compliance determinations.

The information generated by the monitoring, recordkeeping, and reporting requirements described in this ICR is used by the Agency to ensure that facilities affected by the NESHAP continue to operate their control equipment and achieve continuous compliance with the regulation. Adequate monitoring, recordkeeping, and reporting are necessary to ensure compliance with these standards, as required by the CAA. The information collected from recordkeeping and reporting requirements is also used for targeting inspections and is of sufficient quality to be used as evidence in court.

## 3. Non-duplication, Consultations, and Other Collection Criteria

The requested recordkeeping and reporting are required under 40 CFR Part 63, Subpart EEEEE.

## 3(a) Non-duplication

If the subject standards have not been delegated, the information is sent directly to the appropriate EPA regional office. Otherwise, the information is sent directly to the delegated state or local agency. If a state or local agency has adopted its own similar standards to implement the Federal standards, a copy of the report submitted to the state or local agency can be sent to the Administrator in lieu of the report required by the Federal standards. Therefore, duplication does not exist.

## 3(b) Public Notice Required Prior to ICR Submission to OMB

This section is not applicable because this is a rule-related ICR. Nevertheless, the ICR will be available for public review during the public comment period following publication of the proposed amendments to 40 CFR Part 63, Subpart EEEEE, in the *Federal Register*.

#### 3(c) Consultations

The Agency has consulted industry experts and internal data sources to project the number of affected facilities and industry growth over the next three years. The primary source of information as reported by industry, in compliance with the recordkeeping and reporting provisions in these standards, is the Integrated Compliance Information System (ICIS). ICIS is EPA's database for the collection, maintenance, and retrieval of compliance data for industrial and government-owned facilities. The growth rate for the industry is based on our consultations with the Agency's internal industry experts.

Stakeholder outreach occurred with industry groups, including the American Foundry Society and Steel Founders' Society of America, and member companies of these organizations. Further stakeholder and public input are expected through public comment following publication of the proposed RTR amendments to 40 CFR Part 63, Subpart EEEEE in the *Federal Register* and follow-up meetings with interested stakeholders.

#### 3(d) Effects of Less-Frequent Collection

Less frequent information collection would decrease the margin of assurance that facilities are continuing to meet the standards. Requirements for information gathering and recordkeeping are useful techniques to ensure that good operation and maintenance practices are applied and emission limitations are met. If the information required by these standards and the proposed RTR amendments was collected less-frequently, the proper operation and maintenance of control equipment and the possibility of detecting violations would be less likely.

# 3(e) General Guidelines

These reporting or recordkeeping requirements and the proposed RTR amendments do not violate any of the regulations promulgated by OMB under 5 CFR Part 1320, Section 1320.5.

These standards require the respondents to maintain all records, including reports and notifications for at least five years. This is consistent with the General Provisions as applied to the standards. The EPA believes that the 5-year records retention requirement is consistent with the Part 70 permit program and the 5-year statute of limitations on which the permit program is based. The retention of records for five years allows EPA to establish the compliance history of a source, any pattern of non-compliance and to determine the appropriate level of enforcement action. The EPA has found that the most flagrant violators have violations extending beyond five years. In addition, the EPA would be prevented from pursuing the violators due to the destruction or nonexistence of essential records in the absence of the 5-year maintenance requirement.

## 3(f) Confidentiality

Any information submitted to the Agency for which a claim of confidentiality is made will be safeguarded according to the Agency policies set forth in Title 40, chapter 1, part 2, subpart B - Confidentiality of Business Information (CBI) (see 40 CFR 2; 41 <u>FR</u> 36902, September 1, 1976; amended by 43 <u>FR</u> 40000, September 8, 1978; 43 <u>FR</u> 42251, September 20, 1978; 44 <u>FR</u> 17674, March 23, 1979).

#### **3(g) Sensitive Questions**

None of the reporting or recordkeeping requirements or the proposed RTR amendments contain sensitive questions.

## 4. The Respondents and the Information Requested

## 4(a) Respondents/SIC Codes

The respondents to the recordkeeping and reporting requirements and the proposed RTR amendments are iron and steel foundries. The United States Standard Industrial Classification (SIC) codes and the corresponding North American Industry Classification System (NAICS)

codes for iron and steel foundry facilities are listed below.

Standard (40 CFR Part 63, Subpart EEEEE)	SIC Codes	NAICS Codes
Iron Foundries	3321, 3322	331511
Steel Investment Foundries	3324	331512
Steel Foundries (except Investment)	3325	331513

# 4(b) Information Requested

# (i) Data Items

All data in this ICR that are recorded and/or reported are required by the NESHAP for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE) or would be required under the proposed RTR amendments. The NESHAP for Iron and Steel Foundries references 40 CFR Part 63, Subpart A, for several general reporting and recordkeeping requirements that apply for all NESHAP.

A source must make the following notifications and reports:

Requirement	Regulation Reference (40 CFR Part 63)						
Performance Testing							
Initial performance test	§63.7732(a)-(i)						
Subsequent performance tests	§63.7731(a)-(b)						
Notifications							
Notifications (initial, special compliance requirements, performance testing, CMS, and compliance status) and requests (alternative monitoring methods and extension of compliance)	\$63.7750, \$63.6(h)(4)-(5), \$63.7(b)-(c), \$63.8(e), (f) (4) and (f)(6), \$63.9(b)-(h)						
Initial notification due date - existing sources	§63.7750(b), §63.9(b)(2)						
Initial notification due date - new sources	§63.7750(c), §63.9(b)(3)						
Notification of intent to conduct a performance test due date	§63.7750(d), §63.7(b)(1)						
Initial notification of compliance status due date	§63.7750(e), §63.9(h)(2) (ii)						
Notification of request to conduct a performance test to revise the operating limit	§63.7733(e)(1)						
Reports							
Semiannual compliance report due date	§63.7751(a), §63.8(c)(7)-						

Requirement	Regulation Reference (40 CFR Part 63)
	(8)
Semiannual compliance report contents	§63.7751(b), §63.8(c)(7)-(8)
Part 70 monitoring report	§63.7751(d)
Scrap selection and inspection plan or certification	§63.7700(a)-(c)
Operation and maintenance plan	§63.7710(b)
Site-specific monitoring plan for controls not listed	§63.7690(c)
Site-specific test plan when multiple sources are controlled by a single device	§63.7710(i), §63.7(c)(2)-(3)
Site-specific CEMS performance evaluation test plan	§63.7752(b)(2), §63.8(d)(2)
Performance test results	§63.7751(f)
CEMS performance evaluation test results	§63.7751(g)
Recordkeeping	
Notifications and reports	§63.7752(a)(1), §63.10(b) (2)(xiv)
Monitoring system maintenance	§63.7752(a)(2), §63.10(b) (2)(iii)
Performance tests	§63.7752(a)(3), §63.10(b) (2)(viii)
Binder and coating material usage	§63.7752(a)(4)
Records for CEMS	\$63.7752(b), \$63.8(d)(2), \$63.8(f)(6)(i), \$63.10(b)(2) (vi)-(xi)
Records required to demonstrate continuous compliance	§63.7752(c)
Records of failures to meet an emissions limitation	§63.7752(d)
Records retention policy (five years, but only most recent two years must be maintained onsite)	63.7753(a)-(c)

## **Electronic Reporting**

Currently, sources are using monitoring equipment that provides automated parameter data (e.g., continuous opacity or control device parameter monitoring). Although personnel at the facilities still need to evaluate the data, this type of monitoring equipment has significantly reduced the burden associated with monitoring and recordkeeping. Modern Iron and Steel Foundries employ distributive controls on their manufacturing process and have integrated many

of the compliance recordkeeping and reporting requirements into their systems. In addition, regulatory agencies are setting up electronic reporting systems to allow sources to report electronically, which is reducing the reporting burden. As part of the proposed RTR amendments, respondents would be required to use the EPA's Electronic Reporting Tool (ERT) to submit performance test reports for test methods supported by the ERT. Respondents would also be required to submit notifications and semiannual reports through the EPA's Compliance and Emissions Data Reporting Interface (CEDRI).

#### (ii) Respondent Activities

## **Respondent Activities**

Familiarization with the regulatory requirements.

Perform initial and ongoing performance tests using referenced Methods in Appendix A, part 60, (i.e., Methods 1, 2, 3, 4, and 5 or 29 for stack PM/metal HAP testing; Method 9 for opacity; Method 18 for volatile organic HAP testing; Method 18 or Method 25 for total hydrocarbons testing).

Install, operate and maintain CPMS for flow or pressure for each capture system used to comply with the standards.

Install, operate and maintain bag leak detection system and CPMS for pressure drop for each baghouse used to comply with the standards.

Install, operate and maintain CPMS for pressure drop and scrubbing water flow rate for each wet scrubber used to comply with the standard's PM or metal HAP emissions limits.

Install, calibrate, maintain, and operate a CPMS for temperature monitoring for each afterburner or combustion device used to complying with the volatile organic HAP standard for cupolas or scrap preheaters.

Install, operate and maintain CPMS for pH and scrubbing water flow rate for each acid wet scrubber used to comply with the standard's triethylamine (TEA) emissions limits.

Install, calibrate, maintain, and operate a CEMS for measuring volatile organic HAP emissions for applicable cooling and shakeout lines at a new iron and steel foundry.

Write the notifications and reports listed above.

Enter information required to be recorded above.

Submit the required reports developing, acquiring, installing, and utilizing technology and systems for the purpose of collecting, validating, and verifying information.

Develop, acquire, install, and utilize technology and systems for the purpose of processing and maintaining information.

<sup>1</sup> As of 2019, Methods 1, 2, 2A, 2C, 2D, 2F, 2G, 3, 3A, 3B, 4, 5, 17, are the test methods referenced in subpart RRRRR that are included in the ERT. Method 5D for Particulate Matter measurement from positive pressure fabric filter are not yet supported by the ERT. https://www3.epa.gov/ttn/chief/ert/ert\_info.pdf

## **Respondent Activities**

Develop, acquire, install, and utilize technology and systems for the purpose of disclosing and providing information.

Adjust the existing ways to comply with any previously applicable instructions and requirements.

Train personnel to be able to respond to a collection of information.

Transmit, or otherwise disclose the information.

# 5. The Information Collected: Agency Activities, Collection Methodology, and Information Management

## 5(a) Agency Activities

EPA conducts the following activities in connection with the acquisition, analysis, storage, and distribution of the required information:

## **Agency Activities**

Observe initial and ongoing performance tests if necessary.

Review notifications and reports, including performance test reports, and excess emissions reports, required to be submitted by industry.

Audit facility records.

Input, analyze, and maintain data in the Enforcement and Compliance History Online (ECHO) and ICIS.

## 5(b) Collection Methodology and Management

Following notification of the startup, the reviewing authority could inspect the source to determine whether the pollution control devices are properly installed and operated. Performance test reports are used by the Agency to discern a source's initial capability to comply with the emission standard and note the operating conditions under which compliance was achieved. Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs. The semiannual reports are used for problem identification, as a check on source operation and maintenance, and for compliance determinations.

Information contained in the reports is reported by state and local governments in the ICIS Air database, which is operated and maintained by EPA's Office of Compliance. ICIS is EPA's database for the collection, maintenance, and retrieval of compliance data for industrial and government-owned facilities. EPA uses ICIS for tracking air pollution compliance and enforcement by local and state regulatory agencies, EPA regional offices and EPA headquarters.

EPA and its delegated Authorities can edit, store, retrieve and analyze the data.

The records required by this regulation must be retained by the owner/operator for five years.

## 5(c) Small Entity Flexibility

A majority of the respondents are large entities (i.e., large businesses). However, the impact on small entities (i.e., small businesses) was taken into consideration during the development of the regulation. Due to technical considerations involving the process operations and the types of control equipment employed, the recordkeeping and reporting requirements are the same for both small and large entities. The Agency considers these to be the minimum requirements needed to ensure compliance and, therefore, cannot reduce them further for small entities. To the extent that larger businesses can use economies of scale to reduce their burden, the overall burden will be reduced.

## **5(d) Collection Schedule**

The specific frequency for each information collection activity within this request is shown below in Table 1: Annual Respondent Burden and Cost – NESHAP for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE) (Proposed Amendments).

#### 6. Estimating the Burden and Cost of the Collection

Table 1 documents the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry for the subpart included in this ICR. The individual burdens are expressed under standardized headings believed to be consistent with the concept of burden under the Paperwork Reduction Act. Where appropriate, specific tasks and major assumptions have been identified. Responses to this information collection are mandatory.

The 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.

#### 6(a) Estimating Respondent Burden

The average annual burden to industry over the next three years from these recordkeeping and reporting requirements is estimated to be 15,000 hours (Total Labor Hours from Table 1 below). These hours are based on Agency studies and background documents from the development of the regulation and RTR amendments, Agency knowledge and experience with the NESHAP program, the previously approved ICR, and any comments received.

#### **6(b) Estimating Respondent Costs**

#### (i) Estimating Labor Costs

This ICR uses the following labor rates:

Industry Worker	Labor Rates,	110%	
Category <sup>a</sup>	\$/hr <sup>a</sup>	Overhead	Total, \$/hr
Managerial (11-0000)	\$58.91	\$64.80	\$123.71
Technical (17-2081)	\$38.73	\$42.60	\$81.33
Clerical (43-0000)	\$20.38	\$22.42	\$42.80

<sup>&</sup>lt;sup>a</sup> Rates are mean hourly rates for May 2018 and are specific for foundry industry segment NAICS 331500 as provided at https://www.bls.gov/oes/current/naics4\_331500.htm. Numbers in parenthesis are the specific BLS occupation codes used to estimate the hourly rates.

Labor rates and associated costs are based on the Bureau of Labor Statistics (BLS) data. Technical, management, and clerical average hourly rates for private industry workers were taken from the May 2018 National Industry-Specific Occupational Employment and Wage Estimates: NAICS 331500 (Foundries). These BLS rates represent base salaries and do not include the cost of fringe benefits and other overhead costs. The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

## (ii) Estimating Capital/Startup and Operation and Maintenance Costs

The type of industry costs associated with the information collection activities in the subject standard are both labor costs, which are addressed elsewhere in this ICR, and the costs associated with continuous monitoring. The capital/startup costs are one-time costs when a facility becomes subject to these regulations. The annual operation and maintenance costs are the ongoing costs to maintain the monitor(s), such as the costs of calibration gases and replacement parts.

#### (iii) Capital/Startup vs. Operation and Maintenance (O&M) Costs

	Capital/Startup vs. Operation and Maintenance (O&M) Costs										
(A) Continuous Monitoring Device	(B) Capital/ Startup Cost for One Respondent	(C) Number of New Respondents	(D) Total Capital/ Startup Cost, (D=BxC)	(E) Annual O&M Cost for One Respondent	(F) Number of Respondents with O&M <sup>a</sup>	(G) Total O&M Cost (G=ExF)					
Leak detectors	\$9,000	0	\$0	\$1,470	45	\$66,150					
Flow rate monitors	\$7,500	0	\$0	\$2,000	30	\$60,000					
pH monitor	\$7,500	0	\$0	\$2,000	23	\$46,000					
Pressure drop	\$7,500	0	\$0	\$2,000	7	\$14,000					

Capital/Startup vs. Operation and Maintenance (O&M) Costs								
VOC CEM	\$100,000	0	\$0	\$10,000	2	\$20,000		
Total <sup>b</sup>			\$0			\$206,000		

<sup>&</sup>lt;sup>a</sup> Assumes all 45 major source foundries use baghouse to meet melting PM limits, 23 foundries use TEA scrubbers, 7 foundries use wet scrubber for other PM control, and 2 foundries use VOC CEMS.

The total capital/startup costs for this ICR are \$0. This is the total of column D in the above table.

The total operation and maintenance (O&M) costs for this ICR are \$206,000. This is the total of column G.

The average annual cost for capital/startup and operation and maintenance costs to industry over the next three years of the ICR is estimated to be \$206,000. These costs are included in the grand total cost in Table 1.

## 6(c) Estimating Agency Burden and Cost

The only costs to the Agency are those costs associated with analysis of the reported information. EPA's overall compliance and enforcement program includes such activities as the examination of records maintained by the respondents, periodic inspection of sources of emissions, and the publication and distribution of collected information.

The average annual Agency cost during the three years of the ICR is estimated to be \$11,000. This cost is based on the average hourly labor rate as follows:

Agency Worker Categories a	Labor Rates, \$/hr a	60% Overhead	Total, \$/hr
Managerial (GS-13, step 5)	\$41.64	\$24.98	\$66.62
Technical (GS-12, step 1)	\$30.90	\$18.54	\$49.44
Clerical (GS-6, step 3)	\$16.72	\$10.03	\$26.75

<sup>&</sup>lt;sup>a</sup> https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2019/GS h.pdf

These rates are from the Office of Personnel Management (OPM), 2019 General Schedule (incorporating the 1.4% general schedule increase; effective January 2019), which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees. Details upon which this estimate is based appear below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE) (Proposed Amendments).

#### 6(d) Estimating the Respondent Universe and Total Burden and Costs

Based on our research for this ICR, on average over the next three years, approximately 45 existing respondents will be subject to these standards. It is estimated that no additional

<sup>&</sup>lt;sup>b</sup> Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

respondents per year will become subject to these same standards. The overall average number of respondents, as shown in the table below, is 45 per year.

The number of respondents is calculated using the following table that addresses the three years covered by this ICR:

	Number of Respondents										
	Respondents That Su	ubmit Reports	Respondents That Do Not Submit Any Reports								
Year	(A) Number of New Respondents <sup>1</sup>	(B) Number of Existing Respondents	(C) Number of Existing Respondents that keep records but do not submit reports	(D)  Number of Existing Respondents That Are Also New Respondents	(E) Number of Respondents (E=A+B+C-D)						
1	0	45	0	0	45						
2	0	45	0	0	45						
3	0	45	0	0	45						
Average	0	45			45						

<sup>&</sup>lt;sup>1</sup> New respondents include sources with constructed, reconstructed and modified affected facilities.

Column D is subtracted to avoid double-counting respondents. As shown above, the average Number of Respondents over the 3-year period of this ICR is 45.

The total number of annual responses per year is calculated using the following table:

Total Annual Responses									
(A) Information Collection Activity	(B) Number of Respondents	(C) Number of Responses	(D) Number of Existing Respondents That Keep Records But Do Not Submit Reports	(E) Total Annual Responses E=(BxC)+D					
Initial notification	0	0	0	0					
Notification of Performance Test for PM	45	0.4	0	18					
Report of performance test (through CEDRI using ERT)	45	0.4	0	18					
Semiannual compliance reports	45	2	0	90					
			Total	126					

The number of Total Annual Responses is 126.

The total annual labor costs are \$1,190,000. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE) (Proposed Amendments).

#### 6(e) Bottom Line Burden Hours and Cost Tables

The detailed bottom line burden hours and cost calculations for the respondents and the Agency are shown in Tables 1 and 2 below, respectively, and summarized below.

## (i) Respondent Tally

The total annual labor hours are 15,000 hours. Details regarding these estimates may be found below in Table 1. Annual Respondent Burden and Cost – NESHAP for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE) (Proposed Amendments).

We assume that burdens for managerial tasks take 5% of the time required for technical tasks because the typical tasks for managers are to review and approve reports. Clerical burdens are assumed to take 10% of the time required for technical tasks because the typical duties of clerical staff are to proofread the reports, make copies and maintain records.

Furthermore, the annual public reporting and recordkeeping burden for this collection of information is estimated to average 119 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are \$206,000. The cost calculations are detailed in Section 6(b)(iii), Capital/Startup vs. Operation and Maintenance (O&M) Costs.

#### (ii) The Agency Tally

The average annual Agency burden and cost over next three years is estimated to be 269 labor hours at a cost of \$13,000. See below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE) (Proposed Amendments).

We assume that burdens for managerial tasks take 5% of the time required for technical tasks because the typical tasks for managers are to review and approve reports. Clerical burdens are assumed to take 10% of the time required for technical tasks because the typical duties of clerical staff are to proofread the reports, make copies and maintain records.

## 6(f) Reasons for Change in Burden

This ICR is prepared for proposed RTR amendments to the NESHAP for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE). These proposed RTR amendments: (1) adjust references to the Part 63 General Provisions (40 CFR, Part 63, Subpart A) and revise provisions

in the NESHAP (40 CFR Part 63, Subpart EEEEE) to remove the SSM exemption and SSM plan requirement; (2) add electronic submittal of notifications, semiannual reports, and performance test reports; and (3) make technical and editorial changes. Where applicable, adjustments for these proposed RTR amendments are reflected in Tables 1 and 2 of this ICR.

The most significant revision in the overall burden is the reduction of the number of major source foundries from 98 to 45. The former value of 98 major source foundries was based on emission estimations prepared during the development of the NESHAP. Numerous foundries sought and received synthetic minor permits. Additionally, some foundries have closed during period since the promulgation of the NESHAP in 2004. During the development of the RTR Amendments, only 45 major source foundries were identified. Other revisions include revising costs per labor hour to update these values and to use labor rates specific to foundry workers. Additional burden was added to review the amendments, review new electronic reporting forms, and adjust recordkeeping processes to ensure data needed to complete the reporting forms are collected in the proper format. Many of these burden items are one-time requirements that would apply only during the 3-year period of this ICR. Burden estimates were added for the industry to prepare notifications of performance tests, perform ongoing performance tests (required once every 5 years), and report the results of the performance tests through the ERT. Burden estimates were also added for the industry perform ongoing opacity performance tests (required once every 6 months). The ongoing performance tests and opacity observations were missing from the previous ICR. Burden estimates were also revised to remove entries for developing SSM plans and submitting periodic SSM reports.

# 6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 119 hours per response. "Burden" means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may neither conduct nor sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB Control Number. The OMB Control Numbers for EPA regulations are listed at 40 CFR Part 9 and 48 CFR Chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OAR-2019-0373. An electronic version of the public docket is available at http://www.regulations.gov/, which may be used to obtain a copy of the draft

collection of information, submit or view public comments, access the index listing of the contents of the docket, and to access those documents in the public docket that are available electronically. When in the system, select "search," then key in the docket ID number identified in this document. The documents are also available for public viewing at the Enforcement and Compliance Docket and Information Center in the EPA Docket Center (EPA/DC), WJC West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the docket center is (202) 566-1752. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, Attention: Desk Officer for EPA, 725 17th Street, NW, Washington, DC 20503. Please include the EPA Docket ID Number EPA-HQ-OAR-2019-0373 and OMB Control Number 2060-0543 in any correspondence.

#### **Part B of the Supporting Statement**

This part is not applicable because no statistical methods were used in collecting this information.

Table 1: Annual Respondent Burden and Cost – NESHAP for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE) (Proposed Amendments)

Burden item	(A) Person hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person hours per respondent per year (C=AxB)	(D) Respondents per year <sup>a</sup>	(E) Technical person- hours per year (E=CxD)	(F) Management person hours per year (F=Ex0.05)	(G) Clerical person hours per year (G=Ex0.1)	(H) Total Cost per year, (\$) <sup>b</sup>
1. Applications	N/A							
2. Surveys and studies	N/A							
3. Reporting requirements								
a. Familiarize with regulatory requirements <sup>c</sup>	2	1	2	45	90	4.5	9	\$8,262
b. Required activities <sup>d</sup>								
i. Initial performance tests <sup>d, e</sup>	70	2	140	0	0	0	0	\$0
ii. On-going performance tests <sup>e</sup>	70	0.4	28	45	1260	63	126	\$115,662
iii. On-going opacity observations <sup>f</sup>	6	2	12	45	540	27	54	\$49,570
iv. Operation and maintenance plan <sup>d</sup>	72	1	72	0	0	0	0	\$0
v. Scrap selection/inspection plan <sup>d</sup>	10	1	10	0	0	0	0	\$0
vi. Scrap inspection <sup>g</sup>	0.5	350	175	45	7875	393.75	787.5	\$722,890
vii. Monthly inspections of capture systems, maintenance of control devices and monitoring systems, and mold vent ignition plan	2	12	24	25	600	30	60	\$55,077
c. Create information	See 3B							
d. Gather existing information	See 3B							
e. Write report								

Burden item	(A) Person hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person hours per respondent per year (C=AxB)	(D) Respondents per year <sup>a</sup>	(E) Technical person- hours per year (E=CxD)	(F) Management person hours per year (F=Ex0.05)	(G) Clerical person hours per year (G=Ex0.1)	(H) Total Cost per year, (\$) <sup>b</sup>
i. Notification of applicability <sup>d</sup>	2	1	2	0	0	0	0	\$0
ii. Notification of construction/reconstruction d	2	1	2	0	0	0	0	\$0
iii. Notification of actual startup <sup>d</sup>	2	1	2	0	0	0	0	\$0
iv. Notification of special compliance requirements <sup>d</sup>	N/A							
v. Compliance extension request <sup>d</sup>	2	1	2	0	0	0	0	\$0
vi. Notification of performance test <sup>e</sup>	1	0.4	0.4	45	18	0.9	1.8	\$1,652
vii. Site-specific test plan <sup>d</sup>	20	3.8	76	0	0	0	0	\$0
viii. Notification of CEMS performance evaluation <sup>d</sup>	60	1	60	0	0	0	0	\$0
ix. CEMS QA plan <sup>d</sup>	40	1	40	0	0	0	0	\$0
x. Notification of compliance status <sup>d</sup>	8	1	8	0	0	0	0	\$0
xi. NESHAP waiver application	N/A							
xii. Report of performance test (through CEDRI using ERT) <sup>e</sup>	8	0.4	3.2	45	144	7.2	14.4	\$13,219
xiii. Semiannual compliance reports h	12	2	24	45	1080	54	108	\$99,139
Subtotal for Reporting Requirements						13,348		\$1,065,470
4. Recordkeeping requirements								
a. Familiarize with regulatory	See 3A							

Burden item	(A) Person hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person hours per respondent per year (C=AxB)	(D) Respondents per year <sup>a</sup>	(E) Technical person- hours per year (E=CxD)	(F) Management person hours per year (F=Ex0.05)	(G) Clerical person hours per year (G=Ex0.1)	(H) Total Cost per year, (\$) <sup>b</sup>
requirements <sup>c</sup>								
b. Plan activities <sup>i</sup>	3	1	3	15	45	2.25	4.5	\$4,131
c. Implement activities <sup>i</sup>	6	1	6	15	90	4.5	9	\$8,262
d. Develop record system i, j	1	1	1	15	15	0.75	1.5	\$1,377
e. Time to enter information <sup>k</sup>	0.5	52	26	45	1170	58.5	117	\$107,401
f. Time to train personnel <sup>i</sup>	2	1	2	15	30	1.5	3	\$2,754
g. Time to adjust existing ways to comply with previously applicable requirements <sup>i</sup>	2	1	2	15	30	1.5	3	\$2,754
h. Time to transmit information <sup>1</sup>	0.25	2	0.5	45	22.5	1.125	2.25	\$2,065
i. Time for audits	N/A							
Subtotal for Recordkeeping Requirements						1,613		\$128,743
TOTAL LABOR BURDEN AND COST (rounded) <sup>m</sup>					15,000		\$1,190,000	
CAPITAL AND O&M COST (rounded) <sup>m</sup>								\$206,000
GRAND TOTAL (rounded) <sup>m</sup>								\$1,400,000

## **Assumptions:**

<sup>&</sup>lt;sup>a</sup> We have assumed that the average number of respondents that will be subject to this rule will be 45. We have assumed that there will be no new foundries projected during the next three years of this ICR.

This ICR uses the following labor rates from the United States Department of Labor, Bureau of Labor Statistics, May 2018, mean labor rates for Foundries (NAICS 331500) for Management Occupations (11-0000), Environmental Engineer (17-2081) and Office and Administrative Support (43-0000). The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry. Fully burdened hourly rates are: \$123.71 for management; \$81.33 for technical; and \$42.80 for clerical.

 $<sup>^{\</sup>rm c}$  We have assumed that all respondents will have to familiarize with regulatory requirements each year.

<sup>&</sup>lt;sup>d</sup> We have assumed that existing respondents are in compliance with the initial rule requirements. We have assumed that there are no new respondents that would

have to comply with the initial rule requirements including notification and performance test for add-on control devices.

- <sup>e</sup> Performance tests are required for particulate matter by Method 5 or total metal HAP by Method 29, for triethylamine by Method 18, and VOHAP by Method 18 or 25A, depending on the emission source. Performance tests must be repeated once every 5 years. We have assumed each foundry has two controls requiring a performance test. Therefore, retest occurrence rate is 2 tests/5 years = 0.4 test/years.
- <sup>f</sup> Opacity performance tests should be conducted over 3-hour period as specified in §63.6(h)(5)(ii). Assumed average major source foundry would have two separate building openings to observe, so total duration is 6 hours. Tests must be repeated every 6 months for all foundries.
- <sup>g</sup> We have assumed it would talk 0.5 hours each operating day (assumed 350 operating days per year) to inspect scrap piles, scrap shipments, or scrap suppliers, as appropriate, according the scrap selection and inspection plan.
- <sup>h</sup> We have assumed it will take 12 hours for each respondent to enter all the required information concerning deviations from any emissions limitation or operation and maintenance requirements under the NESHAP rule into the electronic form template for each semiannual report.
- <sup>1</sup> We have assumed each foundry will review new electronic reporting forms and will plan, train, and implement recordkeeping activities during the first year. These activities will not be necessary in the second and third year of the ICR, so on average, there will be 15 respondents per year [(45 + 0 + 0)/3 = 15] for these activities during the 3-year period covered by the ICR.
- <sup>j</sup> We have assumed that new respondents would of already have the technology and recordkeeping systems in place to monitor its daily operations and to comply with existing regulations.
- <sup>k</sup> We have assumed that it will take each respondent 0.5 hours 52 times per year to enter information.
- <sup>1</sup> We have assumed that it will take each of the respondents 15 minutes two times per year to transmit information.
- <sup>m</sup> Totals burden and costs have been rounded to 3 significant digits. Figures may not add exactly due to rounding.

Table 2: Average Annual EPA Burden and Cost – NESHAP for Iron and Steel Foundries (40 CFR Part 63, Subpart EEEEE) (Proposed Amendments)

Activity	(A) EPA person- hours per occurrenc e	(B) No. of occurrences per plant per year	(C) EPA person- hours per plant per year (C=AxB)	(D) Plants per year <sup>a</sup>	(E) Technical person- hours per year (E=CxD)	(F) Managemen t person- hours per year (F=Ex0.05)	(G) Clerical person- hours per year (G=Ex0.1)	(H) Total Cost, (\$) <sup>b</sup>
Attend performance test <sup>c</sup>	40	1	40	0	0	0	0	\$0
Report review								
Notification of special compliance requirements	N/A							
Notification of applicability <sup>d</sup>	2	1	2	0	0	0	0	\$0
Notification of performance test or CEMS performance evaluation <sup>e</sup>	1	0.4	0.4	45	18.0	0.90	1.80	\$998
CEMS QA plan <sup>d</sup>	2	1	2	0	0	0	0	\$0
Notification of compliance status <sup>d</sup>	4	1	4	0	0	0	0	\$0
Site-specific test plan <sup>d</sup>	2	1	2	0	0	0	0	\$0
Scrap selection/inspection plan <sup>d</sup>	4	1	4	0	0	0	0	\$0
Performance test report <sup>e</sup>	2	0.4	0.8	45	36.0	1.80	3.60	\$1,996
Semiannual compliance reports <sup>f</sup>	2	2	4	45	180	9.0	18.0	\$9,980
NESHAP waiver application <sup>d</sup>	4	1	4	0	0	0	0	\$0
Compliance extension request <sup>d</sup>	4	1	4	0	0	0	0	\$0
TOTAL ANNUAL BURDEN AND COST (rounded) <sup>g</sup>						269		\$13,000

# **Assumptions:**

<sup>&</sup>lt;sup>a</sup> We have assumed that the average number of respondents that will be subject to this rule will be 45. There will be no new foundries projected during the next three years of this ICR.

<sup>&</sup>lt;sup>b</sup> This cost is based on the following 2019 labor rates which incorporates a 1.6 benefits multiplication factor to account for government overhead expenses: \$66.62 Managerial rate (GS-13, Step 5), \$49.44 Technical rate (GS-12, Step 1), and \$26.75 Clerical rate (GS-6, Step 3). These rates are calculated from the hourly rates

included in the Office of Personnel Management (OPM) 2019 General Schedule which excludes locality rates of pay; the rates have been increased by 60 percent to account for benefit packages available to government employees.

- <sup>c</sup> We have assumed that EPA personnel would not attend any ongoing performance tests.
- <sup>d</sup> We have assumed that existing respondents are in compliance with the initial rule requirements. New respondents would have to comply with the initial rule requirements including notification and performance test for add-on control devices.
- <sup>e</sup> Performance tests are required for particulate matter by Method 5 or total metal HAP by Method 29, for triethylamine by Method 18, and VOHAP by Method 18 or 25A, depending on the emission source. Performance tests must be repeated once every 5 years. We assumed each foundry has two controls requiring a performance test. Therefore, retest occurrence rate is 2 tests/5 years = 0.4 test/years.
- <sup>f</sup> We have assumed that all respondents are required to submit semiannual compliance reports.
- <sup>8</sup> Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.