**SUPPORTING STATEMENT**

**ENVIRONMENTAL PROTECTION AGENCY**

**NSPS for Steel Plants: Electric Arc Furnaces and Argon Oxygen Decarburization Vessels (40 CFR Part 60, Subparts AA and AAa) (Renewal)**

**1. Identification of the Information Collection**

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

NSPS for Steel Plants: Electric Arc Furnaces and Argon Oxygen Decarburization Vessels (40 CFR Part 60, Subparts AA and AAa) (Renewal), EPA ICR Number 1060.20, OMB Control Number 2060-0038.

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

The New Source Performance Standards (NSPS) for Steel Plants: Electric Arc Furnaces and Argon Oxygen Decarburization Vessels (40 CFR Part 60, Subpart AA) were proposed on October 21, 1974; promulgated on September 23, 1975; and most recently-amended on February 22, 2005. These regulations apply to electric arc furnaces and dust-handling systems that commenced construction, modification, or reconstruction either after October 21, 1974 or on/or before August 17, 1983 at steel plants that produce carbon, alloy, or specialty steels. In addition, the New Source Performance Standards (NSPS) for these regulations (40 CFR Part 60, Subpart AAa) were proposed on August 17, 1983; promulgated on October 31, 1984; and most recently- amended on February 22, 2005. These latter regulations apply to electric arc furnaces, argon-oxygen decarburization vessels, and dust-handling systems that commenced either construction, modification, or reconstruction after August 17, 1983, at steel plants that produce carbon, alloy, or specialty steels. New facilities include those that commenced either construction, modification or reconstruction after the date of proposal. This information is being collected to assure compliance with 40 CFR Part 60, Subparts AA and AAa. The EPA proposed revisions to Subparts AA and AAa and proposed a new Subpart AAb on May 16, 2022 (87 FR 29710). The burden for these requirements is not included in this renewal and will be accounted for once the rule is finalized.

In general, all NSPS 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 startup, shutdown, or malfunction in the operation of an affected facility, or any period during which the monitoring system is inoperative. These notifications, reports, and records are essential in determining compliance, and are required of all affected facilities subject to NSPS.

Any owner/operator subject to the provisions of this part shall maintain a file of these measurements and retain the file for at least two years following the date of such measurements, maintenance reports, and records. All reports required to be submitted electronically are submitted through the EPA's Central Data Exchange (CDX), using the Compliance and Emissions Data Reporting Interface (CEDRI), where the delegated state or local authority can review them. If there is no such delegated authority, the EPA regional office can review them. All other reports are sent to the delegated state or local authority. If there is no such delegated authority, the reports are sent directly to the EPA’s regional offices. The use of the term "Designated Administrator" throughout this document refers to the U.S. EPA or a delegated authority such as a state agency. The term "Administrator" alone refers to the U.S. EPA Administrator.

The ‘burden’ to the “Affected Public” may be found below in Table 1: Annual Respondent Burden and Cost – NSPS for Steel Plants: Electric Arc Furnaces and Argon Oxygen Decarburization Vessels (40 CFR Part 60, Subparts AA and AAa) (Renewal). The Federal Government’s ‘burden’ 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 – NSPS for Steel Plants: Electric Arc Furnaces and Argon Oxygen Decarburization Vessels (40 CFR Part 60, Subparts AA and AAa) (Renewal). There are approximately 88 steel plants, which are owned and operated by the steel industry. None of the 88 steel plants in the United States are owned by either state, local, or tribal entities or by the Federal government. They are all owned and operated by privately-owned, for-profit businesses. We assume that they will all respond to EPA inquiries.

Based on our consultations with industry representatives, there are an average of two affected facilities at each plant site and each plant site has only one respondent (i.e., the owner/operator of the plant site).

Over the next three years, approximately 89 respondents per year will be subject to these standards, and three additional respondents (1 respondent per year) will become subject to these same standards. This results in an annual average of 90 respondents per year.

The Office of Management and Budget (OMB) approved the currently-active ICR without any “Terms of Clearance.”

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

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

The EPA is charged under Section 111 of the Clean Air Act (CAA), as amended, to establish standards of performance for new stationary sources that reflect:

**. . .** application of the best technological system of continuous emissions reduction which (taking into consideration the cost of achieving such emissions reduction, or any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. Section 111(a)(l).

The Agency refers to this charge as selecting the best demonstrated technology (BDT). Section 111 also requires that the Administrator review and, if appropriate, revise such standards every eight years.

In addition, 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.

In the Administrator's judgment, particulate matter (PM) emissions from electric arc furnaces, argon-oxygen decarburization vessels, and dust handling systems either cause or contribute to air pollution that may reasonably be anticipated to endanger public health and/or welfare. Therefore, the NSPS were promulgated for this source category at 40 CFR Part 60,Subparts AA and AAa.

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

The recordkeeping and reporting requirements in these standards ensure compliance with the applicable regulations which were promulgated in accordance with the Clean Air Act. The collected information is also used for targeting inspections and as evidence in legal proceedings.

Performance tests are required in order to determine an affected facility’s initial capability to comply with these emission standards. Continuous emission monitors are used to ensure compliance with these same standards at all times. During the performance test a record of the operating parameters, under which compliance was achieved, may be recorded and used to determine compliance in place of a continuous emission monitor.

The notifications required in these 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 that the standards are being met. The performance test may also be observed.

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.

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

The requested recordkeeping and reporting are required under 40 CFR Part 60, Subparts AA and AAa.

**3(a) Nonduplication**

For reports required to be submitted electronically, the information is sent through the EPA's CDX, using CEDRI, where the appropriate EPA regional office can review it, as well as for state and local agencies that have been delegated authority. If a state or local agency has adopted under its own authority its own standards for reporting or data collection, adherence to those non-Federal requirements does not constitute duplication.

For all other reports, 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 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**

An announcement of a public comment period for the renewal of this ICR was published in the *Federal Register* (87 FR 20847) on April 8, 2022. No comments were received on the burden published in the *Federal Register* for this renewal.

**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. Approximately 89 respondents per year will be subject to these standards, and three additional respondents (1 respondent per year) will become subject to these same standards over the three-year period. This results in an annual average of 90 respondents per year.

Industry trade association(s) and other interested parties were provided an opportunity to comment on the burden associated with these standards as were being developed and these same standards have previously been reviewed to determine the minimum information needed for compliance purposes. In developing this ICR, we contacted both the Steel Manufacturers Association, at (202) 296-1515, and the Specialty Steel Industry of North America, at (202) 342-8630.

It is our policy to respond after a thorough review of comments received since the last ICR renewal, as well as for those submitted in response to the first *Federal Register* notice. In this case, no comments were received.

**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 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 do not violate any of the regulations promulgated by OMB under 5 CFR Part 1320, Section 1320.5.

**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 FR 36902, September 1, 1976; amended by 43 FR 40000, September 8, 1978; 43 FR 42251, September 20, 1978; 44 FR 17674, March 23, 1979).

**3(g) Sensitive Questions**

The reporting or recordkeeping requirements in these standards do not include sensitive questions.

**4. The Respondents and the Information Requested**

**4(a) Respondents/SIC Codes**

The respondents to the recordkeeping and reporting requirements are steel plants that produce carbon, alloy, or specialty steels. The United States Standard Industrial Classification (SIC) code for the respondents affected by the standards is SIC 3312: Steel Works, Blast Furnaces (Including Coke Ovens), and Rolling Mills, which corresponds to the North American Industry Classification System (NAICS) code 331110 for Iron and Steel Mills and Ferroalloy Manufacturing.

**4(b) Information Requested**

**(i) Data Items**

In this ICR, all the data that are recorded or reported is required by the NSPS for Steel Plants: Electric Arc Furnaces and Argon Oxygen Decarburization Vessels (40 CFR Part 60, Subparts AA and AAa).

A source must make the following reports:

| **Notifications** | |
| --- | --- |
| Notification of date of construction/reconstruction | §60.7(a)(1) |
| Notification of actual startup | §60.7(a)(3) |
| Notification of initial performance test | §60.8(d) |
| Notification of date upon which demonstration of the continuous monitoring system performance commences | §60.7(a)(5) |
| Notification of procedures to be followed during performance tests if emissions is combined with non-affected facilities | §60.276(b),  §60.276a(e) |
| Physical or operational change | §60.7(a)(4) |
| Use of opacity or visible emissions observations during performance test | §§60.7(a)(6)-(7) |

| **Reports** | |
| --- | --- |
| Report of performance test results | §60.8(a), §60.276(c),  §60.276a(f) |
| Provide semiannual reports of operational values that exceed (i.e., furnace static pressure, fan motor amperes) or are below (i.e., flow rates) those established during the performance test, and of all shop opacity observations in excess of the emission limit | §60.7(c),  §60.273(b),  §60.276(a), §60.276(d), §60.276a(b), §60.276a(c), §60.276a(g) |

A source must keep the following records:

| **Recordkeeping** | |
| --- | --- |
| Startups, shutdowns, and malfunctions, periods where the continuous monitoring system is inoperative. | §60.7(b) |
| Furnace static pressure measurements or daily observations of shop opacity by a certified visible emission observer if EAF is equipped with a direct shell evacuation system (DEC). | §60.273(d), §60.274(f), §60.276(d), §60.274a(f), §60.274a(g) |
| Records for bag leak detection systems. | §60.276(e),  §60.273a(c)  §60.276a(h) |
| Once-per-shift records of operational parameters, such as time and duration of each charge, time and duration of each tap, flow rate data, pressure data. | §§60.274(a)-(b), §60.274a(b) |
| Note deficiencies during monthly control system fan motor amperes operational status check. | §60.274(e),  §60.274a(d) |
| Maintain a file of all measurements including, performance test measurements, and all other information required by this part recorded in a permanent file suitable for inspection. The file shall be retained for at least two years. | §60.7(f), §60.276a(a) |

Electronic Reporting

Some of the respondents are using monitoring equipment that automatically records parameter data. Although personnel at the affected facility must still evaluate the data, internal automation has significantly reduced the burden associated with monitoring and recordkeeping at a plant site.

Electronic copies of records may also be maintained in order to satisfy federal recordkeeping requirements. For additional information on the Paperwork Reduction Act requirements for EPA’s Compliance and Emissions Data Reporting Interface (CEDRI) and Electronic Reporting Tool (ERT) for this rule, see: [*https://www.epa.gov/electronic-reporting-air-emissions/paperwork-reduction-act-pra-cedri-and-ert*](https://www.epa.gov/electronic-reporting-air-emissions/paperwork-reduction-act-pra-cedri-and-ert).

**(ii) Respondent Activities**

| **Respondent Activities** |
| --- |
| Familiarization with the regulatory requirements. |
| Install, calibrate, maintain, and operate COMS for opacity, or CPMS for static pressure, pressure drop and liquid supply pressure for the baghouse or wet scrubber. |
| Perform initial performance test, Reference Method 1, 2, 5, 5D, and 9 tests, and repeat performance tests if necessary. |
| 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 collecting, validating, and verifying information. |
| Develop, acquire, install, and utilize technology and systems for processing and maintaining information. |
| Develop, acquire, install, and utilize technology and systems for disclosing and providing information. |
| 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**

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

|  |
| --- |
| **Agency Activities** |
| 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 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 standards 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. The EPA uses ICIS for tracking air pollution compliance and enforcement by local and state regulatory agencies, EPA regional offices and EPA headquarters. The 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 two years.

**5(c) Small Entity Flexibility**

The majority of respondents are large entities (i.e., large businesses). The recordkeeping and reporting requirements are the same for both small and large entities (mini-mills), since the process operations and the types of control equipment employed by them are similar, independent of their size. However, EPA reduced the reporting frequency for this information from quarterly to semiannually in a December 1990 Federal Register notice to reduce the impact of reporting burden on small businesses. 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.

In EPA’s 1979 Review of Standards of Performance for Electric Arc Furnaces in the Steel Industry, it was noted that approximately 84 percent of the facilities subject to these standards were small entities.[[1]](#footnote-3) In 2022, approximately 6 percent of the facilities subject to these standards are small businesses.

**5(d) Collection Schedule**

The specific frequency for each information collection activity within this request is shown at the end of this document in Table 1: Annual Respondent Burden and Cost – NSPS for Steel Plants: Electric Arc Furnaces and Argon Oxygen Decarburization Vessels (40 CFR Part 60, Subparts AA and AAa) (Renewal).

**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 each of the subparts 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 neither conduct nor 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 56,700 reporting hours (Total Labor Hours from Table 1 below). These hours are based on Agency studies and background documents from the development of this regulation, Agency knowledge and experience with the NSPS 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:

Managerial $157.61 ($75.05 + 110%)

Technical $123.94 ($59.02 + 110%)

Clerical $62.52 ($29.77 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2021, “Table 2. Civilian Workers, by occupational and industry group.” The rates are from column 1, “Total compensation.” The rates have been increased by 110 percent to account for varying industry wage rates and the additional overhead business costs of employing workers beyond their wages and benefits, including business expenses associated with hiring, training, and equipping their employees.

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

The type of industry costs associated with the information collection activities in the subject standard(s) 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 the regulation. The annual operation and maintenance costs are the ongoing costs to maintain the monitor(s) and other costs such as photocopying and postage.

**(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, (B X C) | (E)  Annual O&M Costs for One Respondent | (F)  Number of Respondents with O&M | (G)  Total O&M,  (E X F) |
| Continuous Opacity Monitors a | $25,000 | 0 | $0 | $7,500 | 23.98 | $179,820 |
| Furnace Static Pressure Monitors b | $300 | 1 | $300 | $0 | 46.53 | $0 |
| Volumetric Flow Rate Monitor c | $18,000 | 1 | $18,000 | $0 | 90 | $0 |
| **Totals (rounded) d** |  |  | **$18,300** |  |  | **$180,000** |

a We have assumed that approximately 40 percent of respondents (36 respondents) use negative pressure baghouses. Of these, 66.6 percent (23.98 respondents) use COMS to measure stack emissions and 33.4 percent (12.02 respondents) have elected to use the alternative option of using BLDS monitoring couple with visible emissions observations instead of using COMS.

b We have assumed that approximately 51.7 percent of the respondents (or 46.53 respondents) will choose to comply with the fugitive emissions monitoring requirements by measuring the furnace static pressure continuously and 48.3 percent (43.47 respondents) will choose the alternative option of daily opacity shop observations by a certified visible emission observer couple with the use of bag leak detection systems (BLDS).

c All respondents (90) are required to install flow rate monitors as part of the monitoring of operations rule requirements. The operating and maintenance costs associated with the flow monitors are negligible.

d Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

The total capital/startup costs for this ICR are $18,300. This is the total of column D in the above table.

The total operation and maintenance (O&M) costs for this ICR are $180,000. 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 $198,000. These are the recordkeeping costs.

**6(c) Estimating Agency Burden and Cost**

The only costs to the Agency are those costs associated with analysis of the reported information. The 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 $87,700.

This cost is based on the average hourly labor rate as follows:

Managerial $70.56 (GS-13, Step 5, $44.10 + 60%)

Technical $52.37 (GS-12, Step 1, $32.73 + 60%)

Clerical $28.34(GS-6, Step 3, $17.17 + 60%)

These rates are from the Office of Personnel Management (OPM), 2022 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to Federal government employees. Details upon which this estimate is based appear at the end of this document in Table 2: Average Annual EPA Burden and Cost – NSPS for Steel Plants: Electric Arc Furnaces and Argon Oxygen Decarburization Vessels (40 CFR Part 60, Subparts AA and AAa) (Renewal).

**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 88 existing respondents will be subject to these standards. It is estimated that 1 additional respondent per year will become subject. The overall average number of respondents, as shown in the table below, is 90 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 Submit Reports | | Respondents That Do Not Submit Any Reports |  | |
| Year | (A)  Number of New Respondents 1 | (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 | 1 | 88 | 0 | 0 | 89 |
| 2 | 1 | 89 | 0 | 0 | 90 |
| 3 | 1 | 90 | 0 | 0 | 91 |
| **Average** | **1** | **89** | **0** | **0** | **90** |

1 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 three-year period of this ICR is 90.

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 |
| Notification of actual startup | 1 | 1 | 0 | 1 |
| Notification of construction/ modification | 1 | 1 | 0 | 1 |
| Notification of performance test | 1 | 1 | 0 | 1 |
| Reports of performance test results | 1 | 1.05 | 0 | 1.05 |
| Semiannual reports | 90 | 2 | 0 | 180 |
|  |  |  | **Total** | **184** |

The number of Total Annual Responses is 184.

The total annual labor costs are $6,800,000. Details regarding these estimates may be found at the end of this document in Table 1: Annual Respondent Burden and Cost – NSPS for Steel Plants: Electric Arc Furnaces and Argon Oxygen Decarburization Vessels (40 CFR Part 60, Subparts AA and AAa) (Renewal).

**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 at the end of this document, respectively, and summarized below.

**(i) Respondent Tally**

The total annual labor hours are 56,700. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NSPS for Steel Plants: Electric Arc Furnaces and Argon Oxygen Decarburization Vessels (40 CFR Part 60, Subparts AA and AAa) (Renewal).

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 308 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are $198,000. 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 1,720 labor hours at a cost of $87,700; see below in Table 2: Average Annual EPA Burden and Cost – NSPS for Steel Plants: Electric Arc Furnaces and Argon Oxygen Decarburization Vessels (40 CFR Part 60, Subparts AA and AAa) (Renewal).

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**

There is an adjustment decrease in the total estimated burden as currently identified in the OMB Inventory of Approved Burdens. This decrease is not due to any program changes. The change in the burden and cost estimates is due to a decrease in the average number of respondents per year subject to subparts AA and AAa based on information gathered by EPA for a proposed rulemaking. The decrease in cost is offset somewhat by the use of updated labor rates from the most-recent Bureau of Labor Statistics report (September 2021).

Although there was a decrease in the average number of respondents per year, there was an increase in the number of new sources each year. This resulted in an adjustment increase to the total capital/startup cost. There is an adjustment decrease in the operation and maintenance (O&M) costs as calculated in section 6(b)(iii) compared with the costs in the previous ICR due to the decreased number of respondents based on more recent information provided by EPA.

**6(g) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 308 hours per response. ‘Burden’ means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information either 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-2022-0057. An electronic version of the public docket is available at [*http://www.regulations.gov/*](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. Due to COVID-19 precautions, entry to the Reading Room is available by appointment only. Please contact personnel in the Reading Room to schedule an appointment. 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, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OAR-2022-0057 and OMB Control Number 2060-0038 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: Table 1: Annual Respondent Burden and Cost – NSPS for Steel Plants: Electric Arc Furnaces and Argon Oxygen Decarburization Vessels (40 CFR Part 60, Subparts AA and AAa) (Renewal)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Burden Item** | **(A)** | **(B)** | **(C)** | **(D)** | **(E)** | **(F)** | **(G)** | **(H)** |
| **Respondent Hours per Occurrence** | **Number of Occurrences per Respondent per Year** | **Hours per Respondent per Year (A x B)** | **Number of Respondents per Year a** | **Technical Hours per Year (C x D)** | **Management Hours per Year (E x 0.05)** | **Clerical Hours per Year (Ex0.1)** | **Total Labor Costs per Year, $ b** |
| 1. Applications | N/A |  |  |  |  |  |  |  |
| 2. Survey and Studies | N/A |  |  |  |  |  |  |  |
| 3. Reporting Requirements |  |  |  |  |  |  |  |  |
| A. Read and understand rule requirements | 1 | 1 | 1 | 90 | 90 | 4.5 | 9 | $12,426.53 |
| B. Required activities |  |  |  |  |  |  |  |  |
| Initial Performance tests c | 364 | 1.64 | 596.96 | 1 | 596.96 | 29.848 | 59.696 | 82,423.76 |
| Repeat Performance tests c | 364 | 0.082 | 29.848 | 1 | 29.848 | 1 | 3 | 4,121.19 |
| Monitoring of operations and emissions d, e | ------------------------See 4E---------------------------- | | | | | | |  |
| D. Gather Existing Information | -------------------See 3B and 4E----------------------- | | | | | | |  |
| E. Write report |  |  |  |  |  |  |  |  |
| Notification of construction/modification | 2 | 1 | 2 | 1 | 2 | 0.1 | 0.2 | 276.15 |
| Notification of actual startup | 2 | 1 | 2 | 1 | 2 | 0.1 | 0.2 | 276.15 |
| Notification of initial performance test | 2 | 1 | 2 | 1 | 2 | 0.1 | 0.2 | 276.15 |
| Reports of performance test results | ------------------------See 3B---------------------------- | | | | | | |  |
| Semiannual reports f | 16 | 2 | 32 | 90 | 2,880 | 144 | 288 | $397,648.80 |
| ***Subtotal for Reporting******Requirements*** |  |  |  |  | ***4,143*** | | | ***$497,449*** |
| 4. Recording Requirements |  |  |  |  |  |  |  |  |
| A. Read and understand rule requirements | ------------------------See 3A---------------------------- | | | | | | |  |
| B. Plan activities | ------------------------See 3B---------------------------- | | | | | | |  |
| C. Implement activities | ------------------------See 3B---------------------------- | | | | | | |  |
| D. Develop record system | N/A |  |  |  |  |  |  |  |
| E. Time to enter and transmit information: |  |  |  |  |  |  |  |  |
| Records of daily monitoring of operations d | 0.75 | 350 | 262.5 | 90 | 23,625 | 1,181.25 | 2362.5 | $3,261,962.81 |
| Records of daily emissions monitoring by a certified observer e, h | 0.5 | 350 | 175 | 43.47 | 7,607.25 | 380.36 | 760.73 | $1,050,352.03 |
| Records of COMS g, i | 0.5 | 350 | 175 | 23.98 | 4,195.8 | 209.79 | 419.58 | $579,324.60 |
| Records of BLDS h, i | 0.5 | 350 | 175 | 12.02 | 2,104.2 | 105.21 | 210.42 | $290,532.15 |
| Records of static pressure on furnace h | 0.5 | 350 | 175 | 46.53 | 8,142.75 | 407.14 | 814.28 | $1,124,289.85 |
| F. Time to train personnel | N/A |  |  |  |  |  |  |  |
| G. Time for audits | N/A |  |  |  |  |  |  |  |
| ***Subtotal for Recordkeeping Requirements*** |  |  |  |  | ***52,526*** | | | ***$6,306,461*** |
| **Total Labor Burden and Cost (rounded) j** |  |  |  |  | **56,700** | | | **$6,800,000** |
| **Total Capital and O&M Cost (rounded) j** | | | | | | | | **$198,000** |
| **Grand Total (rounded) j** | | | | | | | | **$7,000,000** |
|  |  |  |  |  |  |  |  |  |
| **Assumptions:** |  |  |  |  |  |  |  |  |
| a We have assumed that there are an annual average of 89 sources currently subject to the NSPS, subparts AA and AAa. We have further assumed that 3 new sources will become subject to these subparts over the three-year period covered by this ICR renewal (1 new source per year). Therefore, the average number of respondents per year is estimated to be 90. | | | | | | | | |
| b This ICR uses the following labor rates: $157.61 per hour for Executive, Administrative, and Managerial labor; $123.94 per hour for Technical labor, and $62.52 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, Sept 2021, “Table 2. Civilian Workers, by occupational and industry group.” The rates are from column 1, “Total compensation.” The rates have been increased by 110% to account for the benefit packages available to those employed by private industry. | | | | | | | | |
| c We have assumed that existing sources will not perform initial rule requirements including the initial performance test and notification requirements. We have assumed that 5 percent of new sources would repeat performance tests due to failure. We have assumed 1.64 baghouses per new facility based on collected information from existing sources (1.64 = 54 baghouses / 33 EAF facilities). | | | | | | | | |
| d Daily monitoring of operations includes time and duration of each charge, time and duration of each tap, flow rate data and pressure data. In addition, sources are required to conduct monthly operational status checks of the equipment (e.g., physical appearance, pressure sensors, dampers, damper switches). | | | | | | | | |
| e Daily emissions monitoring includes stack emissions monitoring using a continuous opacity monitor if the source has an EAF equipped with a direct shell evacuation system (DEC) and uses a negative pressure baghouse and has not elected the alternative option. In addition, the source is required to conduct fugitive emissions monitoring using a furnace static pressure monitoring device or by electing to perform shop opacity observations using a certified visible emissions observer, it the source has an EAF equipped with a DEC. | | | | | | | | |
| f Sources are required to provide semiannual reports of opacity observations and operational values (i.e., furnace static pressure, fan motor amperes) that exceed or are below (i.e, flow rates) those established during the performance test, and of all shop opacity observations in excess of the emission limit. | | | | | | | | |
| g We have assumed that the new source will equip its EAFs with a DEC system and use a positive pressure baghouse, and therefore, will not be required to install a continuous opacity monitor (COMS). | | | | | | | | |
| h We have assumed that approximately 51.7 percent of the respondents (or 46.53 respondents) will choose to comply with the fugitive emissions monitoring requirements by measuring the furnace static pressure continuously and 48.3 percent (43.47 respondents) will choose the alternative option of daily opacity shop observations by a certified visible emission observer couple with the use of bag leak detection systems (BLDS). | | | | | | | | |
| i We have assumed that approximately 40 percent of respondents (36 respondents) use negative pressure baghouses. Of these, 66.6 percent (23.98 respondents) use COMS to measure stack emissions and 33.4 percent (12.02 respondents) have elected to use the alternative option of using BLDS monitoring couple with visible emissions observations instead of using COMS. | | | | | | | | |
| j Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding. | | | | | | | | |

**Table 2: Average Annual EPA Burden and Cost – NSPS for Steel Plants: Electric Arc Furnaces and Argon Oxygen Decarburization Vessels (40 CFR Part 60, Subparts AA and AAa) (Renewal)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **(A)** | **(B)** | **(C)** | **(D)** | **(E)** | **(F)** | **(G)** | **(H)** |
| **EPA Hours per Occurrence** | **Number of Occurrences per Plant Per Year** | **EPA Hours per Year (AxB)** | **Plants per Year a** | **Technical Hours per Year  (CxD)** | **Management Hours per Year (Ex0.05)** | **Clerical Hours per Year (Ex0.1)** | **Costs per Year, $ b** |
| Notification of construction/modification | 2 | 1 | 2 | 1 | 2 | 0.1 | 0.2 | $117.46 |
| Notification of actual startup | 1 | 1 | 1 | 1 | 1 | 0.05 | 0.10 | $58.73 |
| Notification of performance test c | 0.5 | 1 | 0.5 | 1 | 0.5 | 0.03 | 0.05 | $29.37 |
| Initial performance test (observed) c | 24 | 1.64 | 39.36 | 1 | 39.36 | 2 | 4 | $2,311.69 |
| Repeat Performance test (observed) c | 24 | 0.082 | 1.968 | 1 | 1.968 | 0.10 | 0.20 | $115.58 |
| Review Performance Test results c | 8 | 1.05 | 8.4 | 1 | 8.4 | 0 | 1 | $493.35 |
| Notification of COMS Demonstration | 0.5 | 1 | 0.5 | 1 | 0.5 | 0.03 | 0.05 | $29.37 |
| Semiannual reports | 8 | 2 | 16 | 90 | 1,440 | 72 | 144 | $84,574.08 |
| **TOTAL (rounded) d** |  |  |  |  | **1,720** | | | **$87,700** |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Assumptions |  |  |  |  |  |  |  |  |
| a We have assumed that there are an annual average of 89 sources currently subject to the NSPS, subparts AA and AAa. We have further assumed that 3 new sources will become subject to these subparts over the three-year period covered by this ICR renewal (1 new source per year). Therefore, the average number of respondents per year is estimated to be 90. | | | | | | | | |
| b This cost is based on the following labor rates: Managerial rate of $70.56 (GS-13, Step 5, $44.10 + 60%), Technical rate of $52.37 (GS-12, Step 1, $32.73 + 60%), and Clerical rate of $28.34 (GS-6, Step 3, $17.71 + 60%). These rates are from the Office of Personnel Management (OPM), 2022 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees. | | | | | | | | |
| c Wehave assumed that existing sources will not perform initial rule requirements including the initial performance test and notification requirements. We have assumed that 5 percent of new sources would repeat performance tests due to failure. We have assumed 1.64 baghouses per new facility based on collected information from existing sources (1.64 = 54 baghouses / 33 EAF facilities). | | | | | | | | |
| d Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding. | | | | | | | | |

1. Review of Standards of Performance for Electric Arc Furnaces in Steel Industry. EPA-450 3-79-033. October, 1979. [↑](#footnote-ref-3)