**SUPPORTING STATEMENT**

 **ENVIRONMENTAL PROTECTION AGENCY**

**NSPS for Primary and Secondary Emissions from Basic Oxygen Furnaces (40 CFR Part 60, Subparts N and Na) (Renewal)**

**1. Identification of the Information Collection**

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

NSPS for Primary and Secondary Emissions from Basic Oxygen Furnaces (40 CFR Part 60, Subparts N and Na) (Renewal), EPA ICR Number 1069.12, OMB Control Number 2060-0029.

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

The New Source Performance Standards (NSPS) for Primary Emissions from Basic Oxygen Process Furnaces (Subpart N) were: proposed on June 11, 1973; promulgated on March 8, 1974; and amended on October 17, 2000. These regulations apply to each basic oxygen process furnace (BOPF) in an iron and steel plant that commenced construction, modification, or reconstruction after the date of proposal. An opacity limit was promulgated on April 13, 1978 as a supplement to the mass standard. On January 20, 1983, amendments to the Standards of Performance for Primary Emissions from Basic Oxygen Process Furnaces merged with Standards of Performance for Secondary Emissions from Basic Oxygen Process Steelmaking Facilities (Subpart Na). Subpart Na is applicable to any top‑blown BOPF, and hot metal transfer station or skimming stations used with bottom-blown or top-blown BOPF’s for which construction, reconstruction, or modification commenced after January 20, 1983. Subpart Na was promulgated on January 2, 1986. This information is being collected to assure compliance with 40 CFR Part 60, Subparts N and Na.

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 containing these documents, and retain the file for at least two 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.

All respondents are owned and operated by the iron and steel industry. None of the facilities in the United States are owned by state, local, tribal or the Federal government. They 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 – NSPS for Primary and Secondary Emissions from Basic Oxygen Furnaces (40 CFR Part 60, Subparts N and Na) (Renewal). The “burden” to the Federal Government is attributed entirely to work performed by either Federal employees or government contractors and can be found below in Table 2: Average Annual EPA Burden and Cost – NSPS for Primary and Secondary Emissions from Basic Oxygen Furnaces (40 CFR Part 60, Subparts N and Na) (Renewal). We assume that they will all respond to EPA inquiries.

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

Over the next three years, approximately 18 respondents per year will be subject to these standards, and no additional respondents per year will become subject to these standards.

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 emissions from BOPFs at iron and steel plants 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 N and Na.

**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 the emission standards. Continuous emission monitors are used to ensure compliance with these standards at all times.

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 that these 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 N and Na.

**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**

An announcement of a public comment period for the renewal of this ICR was published in the Federal Register (82 FR 29552) on June 29, 2017. No comments were received on the burden published 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 the standard, 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 18 respondents will be subject to these standards over the three-year period covered by this ICR.

Industry trade associations and other interested parties were provided an opportunity to comment on the burden associated with these standards as they were being developed and these same standards have been reviewed previously to determine the minimum information needed for compliance purposes. In developing this ICR, we contacted both the American Iron and Steel Institute (AISI), at (202) 945-4777, and North Start BlueScope Steel, at (419) 822-2200.

It is our policy to respond after a thorough review of comments received since the last ICR renewal, as well as 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 these 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 the standard 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 BOPFs at iron and steel plants. The United States Standard Industrial Classification (SIC) code for the respondents affected by the standards and the corresponding North American Industry Classification System (NAICS) codes are listed in the table below:

|  |  |  |
| --- | --- | --- |
| **Standards (40 CFR Part 60, Subparts N and Na)** | **SIC Codes** | **NAICS Codes** |
| Iron and Steel Mills | 3312, 3399 | 331111 |
| Steel Wire Drawing | 3315 | 331222 |
| Rolled Steel Shape Manufacturing | 3312, 3316, 3399 | 331221 |
| Iron and Steel Pipe and Tube Manufacturing from Purchased Steel | 3317 | 331210 |

**4(b) Information Requested**

**(i) Data Items**

In this ICR, all the data that is recorded or reported is required by the NSPS for Primary and Secondary Emissions from Basic Oxygen Furnaces (40 CFR Part 60, Subparts N and Na).

A source must make the following reports:

| **Notifications** |
| --- |
| Notification of construction/reconstruction | 60.7(a)(1) |
| Notification of actual startup | 60.7(a)(3) |
| Notification of physical or operational change | 60.7(a)(4) |
| Notification of monitoring system performance commencement | 60.7(a)(5)  |
| Performance test results | 60.8(a) |
| Notification of performance test | 60.8(d) |
| Demonstration of continuous monitoring system | 60.7(a)(5) |

| **Reports** |
| --- |
| Semiannual compliance reports of all measurements over any 3-hour period that average more than 10 percent below the average level maintained during the most recent performance test in which the facility demonstrated compliance with the standard | 60.7(c), 60.143(c-e), 60.143a(d-e) |

A source must keep the following records:

| **Recordkeeping** |
| --- |
| Maintain records of startup, shutdown, or malfunction period where the continuous monitoring system is inoperative | 60.7(b) |
| Emission test results, continuous monitoring system data, performance test results and other data needed to determine compliance with mass and visible emission limits | 60.7(f), 60.145a |
| Time and duration of each steel production cycle | 60.143(a) |
| Record the time and duration of the rates or levels of any diversion of exhaust gases from the main stack servicing the BOPF | 60.143(a) |
| Record the various rates or levels of exhaust ventilation at each phase of the cycle through each duct of the secondary emission capture system | 60.143a(a-b) |
| Record of time and duration of the visible emission data sets | 60.145a(d) |
| Record the particulate matter concentration (i.e., opacity levels) exiting the control device and discharge into the atmosphere | 60.142(a-b) |
| Record the pressure loss through the venture constriction of the scrubber continuously | 60.143(a)(1) |
| Record the water supply pressure to the venture scrubber control equipment continuously | 60.143(a)(2) |
| Records are required to be retained for 2 years | 60.7(f) |

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.

**(ii) Respondent Activities**

| **Respondent Activities** |
| --- |
| Familiarization with the regulatory requirements. |
| Install, calibrate, maintain, and operate CMS for opacity, or for pressure drop and liquid supply pressure for venture scrubber. |
| Perform initial performance test, Reference Method 5, 9, and 2 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 the purpose of collecting, validating, and verifying information. |
| Develop, acquire, install, and utilize technology and systems for the purpose of processing and maintaining information. |
| Develop, acquire, install, and utilize technology and systems for the purpose of 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**

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 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 two 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 – NSPS for Primary and Secondary Emissions from Basic Oxygen Furnaces (40 CFR Part 60, Subparts N and Na)(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 6,280 hours (Total Labor Hours from Table 1 below). These hours are based on Agency studies and background documents from the development of the 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 $144.33 ($68.73+ 110%)

Technical $108.28 ($51.56 + 110%)

Clerical $53.34 ($25.40 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2016, “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 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 standards 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 monitors 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) |
| Flow meters to measure exhaust gas flow rate  | $18,000 | 0 | $0 | $900 | 18 | $16,200 |
| Flow meters to measure pressure flow rate | 0 | 0 | $0 | $900 | 15 | $13,500 |
| Total |  |  | $0 |  |  | $29,700 |

 Note: 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 $0. This is the total of column D in the above table.

The total operation and maintenance (O&M) costs for this ICR are $29,700. 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 $29,700. These are record-keeping costs.

**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 activities such 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 $9,710.

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

 Managerial $64.80 (GS-13, Step 5, $40.50 + 60%)

 Technical $48.08 (GS-12, Step 1, $30.05 + 60%)

 Clerical $26.02 (GS-6, Step 3, $16.26 + 60%)

These rates are from the Office of Personnel Management (OPM), 2017 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. Details upon which this estimate is based appear below in Table 2: Average Annual EPA Burden and Cost – NSPS for Primary and Secondary Emissions from Basic Oxygen Furnaces (40 CFR Part 60, Subparts N and Na) (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 18 existing respondents will be subject to these standards. It is estimated that no additional respondents per year will become subject to these same standards. The overall average number of respondents, as shown in the table below, is 18 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 | 0 | 18 | 0 | 0 | 18 |
| 2 | 0 | 18 | 0 | 0 | 18 |
| 3 | 0 | 18 | 0 | 0 | 18 |
| Average | 0 | 18 | 0 | 0 | 18 |

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 18.

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 ResponsesE=(BxC)+D |
| Notification of construction or modification | 0 | 1 | 0 | 0 |
| Notification of performance test | 0 | 1 | 0 | 0 |
| Report results of performance test | 0 | 1 | 0 | 0 |
| Semiannual report | 18 | 2 | 0 | 36 |
|  |  |  | Total | 36 |

The number of Total Annual Responses is 36.

The total annual labor costs are $660,000. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NSPS for Primary and Secondary Emissions from Basic Oxygen Furnaces (40 CFR Part 60, Subparts N and Na) (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 below, respectively, and summarized below.

**(i) Respondent Tally**

The total annual labor hours are 6,280 hours. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NSPS for Primary and Secondary Emissions from Basic Oxygen Furnaces (40 CFR Part 60, Subparts N and Na) (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 174 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are $29,700. 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 207 labor hours at a cost of $9,710; see below in Table 2: Average Annual EPA Burden and Cost – NSPS for Primary and Secondary Emissions from Basic Oxygen Furnaces (40 CFR Part 60, Subparts N and Na) (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**

The increase in burden from the most recently-approved ICR is due to an adjustment. Hours were added to approximate the time spent by each source each year to familiarize with the rule requirements, and the total hours were rounded to three significant digits, which resulted in a small increase in labor hours since the last renewal.

**6(g) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 174 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 not conduct or 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-OECA-2014-0037. 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, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OECA-2014-0037 and OMB Control Number 2060-0029 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 – NSPS for Primary and Secondary Emissions from Basic Oxygen Furnaces (40 CFR Part 60, Subparts N and Na) (Renewal)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 a** | **(E)Technical person- hours per year (E=CxD)** | **(F)Management person hours per year (Ex0.05)** | **(G) Clerical person hours per year (Ex0.1)** | **(H) Total Cost per year b** |
| 1. Applications | N/A |   |   |   |   |   |   |   |
| 2. Survey and Studies | N/A |   |   |   |   |   |   |   |
| 3. Reporting requirements |   |   |   |   |   |   |   |   |
|  A. Familiarization with regulatory requirements c | 1 | 1 | 1 | 18 | 18 | 0.9 | 1.8 | $2,174.95  |
|  B. Required activities |   |   |   |   |   |   |   |   |
|  Performance tests d | 194 | 1 | 194 | 0 | 0 | 0 | 0 | $0  |
|  Repeat of performance test e | 194 | 0.1 | 194 | 0 | 0 | 0 | 0 | $0  |
|  Daily monitoring of emissions and operations | See 4E |   |   |   |   |   |   |   |
|  C. Create information | See 3B and 4E |   |   |   |   |   |   |   |
|  D. Gather existing information | See 3B and 4E |   |   |   |   |   |   |   |
|  E. Write Report |   |   |   |   |   |   |   |   |
|  Notification of reconstruction or modification | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
|  Notification of performance test | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
|  Performance test results | 32 | 1 | 32 | 0 | 0 | 0 | 0 | $0  |
|  Semiannual report of excess emissions f | 10 | 2 | 20 | 18 | 360 | 18 | 36 | $43,498.98 |
| ***Subtotal for Reporting Requirements*** |   |   |   |   | *435* | *$45,674* |
| 4. Recordkeeping requirements |   |   |   |   |   |   |   |   |
|  A. Familiarization with rule requirements  | See 3A |   |   |   |   |   |   |   |
|  B. Plan activities | See 3B |   |   |   |   |   |   |   |
|  C. Implement Activities  | See 3B |   |   |   |   |   |   |   |
|  D. Develop record system | N/A |   |   |   |   |   |   |   |
|  E. Time to enter information |   |   |   |   |   |   |   |   |
|  Records of operating parameters  |   |   |   |   |   |   |   |   |
|  - Exhaust ventilation rate g | 0.25 | 365 | 91.25 | 18 | 1,642.5 | 82.13 | 164.25 | $198,464.10 |
|  - Across the venture scrubber (i.e., pressure drop and water supply pressure) h | 0.25 | 365 | 91.25 | 15 | 1,368.75 | 68.44 | 136.88 | $165,386.75 |
|  Records of performance test  | See 3B |   |   |   |   |   |   |   |
|  Records of duration of each steel production cycle, and time and duration of any diversion of exhaust gases from the main stack serving the BOPF i | 0.25 | 365 | 91.25 | 18 | 1,642.5 | 82.13 | 164.25 | $198,464.10 |
|  Recalibrate and check monitoring devices j | 8 | 1 | 8 | 18 | 144 | 7.2 | 14.4 | $17,399.59 |
|  F. Time to train personnel  |   |   |   |   |   |   |   |   |
|  Certification of opacity observer k  | 8 | 2 | 16 | 18 | 288 | 14.4 | 28.8 | $34,799.18 |
|  G. Time for audits | N/A |   |   |   |   |   |   |   |
| ***Subtotal for Recordkeeping Requirements***  |   |   |   |   | *5,849* | *$614,514* |
| **TOTAL LABOR BURDEN AND COST (rounded)l** |   |   |   |   | **6,280** | **$660,000** |
| **TOTAL CAPITAL AND O&M COST (rounded)l** |   |   |   |   |  |  |  | **$29,700** |
| **GRAND TOTAL (rounded)l** |   |   |   |   |  |  |  | **$690,000** |

Assumptions:

a We have assumed that there are approximately 18 respondents (i.e., BOPF shops) that are subject to the regulation, with no additional new or reconstructed sources becoming subject to the rule over the next three years.

b This ICR uses the following labor rates: $144.03 per hour for Executive, Administrative, and Managerial labor; $108.28 per hour for Technical labor, and $53.34 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2016, Table 2. Civilian Workers, by Occupational and Industry groups. The rates are from column 1, Total Compensation. The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

c We have assumed that it will take one hour for each respondent to familiarize with rule requirements.

d We have assumed that it will take 194 hours for each respondent to complete a performance test. This is a one time requirement.

e We have assumed that it will take 10 percent of respondents to repeat performance test due to failures. This is a one time requirement.

f We have assumed that it will take 10 hours twice per year for each respondent to write the semiannual reports if excess emission.

g We have assumed that it will take each of the eighteen respondent 0.25 hours, 365 times per year, to record the exhaust ventilation rate.

h We have assumed fifteen of the existing respondents will use Venturi scrubbers as primary emission control systems. We have assumed that it will take each of the fifteen respondent 0.25 hours, 365 times per year, will enter information on records of CMS operating parameters across the venturi scrubber.

i We have assumed that it will take each respondent 0.25 hours, 365 days per year, to record the duration of each steel production cycle.

j We have assumed that it will take each respondent eight hours once per year to recalibrate and check monitoring devices.

k We have assumed that it will take each respondent eight hours twice per year to train personnel on certification of opacity observer.

l  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 Primary and Secondary Emissions from Basic Oxygen Furnaces (40 CFR Part 60, Subparts N and Na) (Renewal)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **(A)EPA person-hours per occurrence** | **(B)No. of occurrences per plant per year** | **(C)EPA person hours per plant per year (AxB)** | **(D)Plants per year a**  | **(E) Technical person-hours per year(CxD)** | **(F)Management person-hours per year(E x 0.05)** | **(G)Clerical person-hours per year(E x 0.1)** | **(H)Cost, $b** |
| New facility |   |   |   |   |   |   |   |   |
|  Notification of performance test c | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
|  Report of performance test results d | 8 | 1 | 8 | 0 | 0 | 0 | 0 | $0  |
|  Notification of reconstruction/modification e | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
| Review reports: Existing and new sources  |   |   |   |   |   |   |   |   |
|  Semiannual reports of excess emissions and monitoring systems performance f | 5 | 2 | 10 | 18 | 180 | 9 | 18 | $9,705.96  |
| **TOTAL ANNUAL BURDEN AND COST (rounded)g** |   |   |   |   | **207** | **$9,710**  |

Assumptions:

a We have assumed that there are approximately 18 respondents (i.e., BOPF shops) that are subject to the regulation, with no additional new or reconstructed sources becoming subject to the rule over the next three years.

b This cost is based on the following hourly labor rates times a 1.6 benefits multiplication factor to account for government overhead expenses: $64.80 for Managerial, $48.08 for Technical and $26.02 Clerical. These rates are from the Office of Personnel Management (OPM) "2017 General Schedule" which excludes locality rates of pay.

c We have assumed that it will take two hours once per year for each respondent to perform the performance test. This is a one-time requirement.

d We have assumed that it will take eight hours once per year for each respondent to report the performance test results. This is a one-time requirement.

e We have assumed that it will take two hours once per year for each respondent to comply with the notification requirements of the rule. This is a one-time requirement.

f We have assumed that it will take five hours twice per year for each respondent to submit semiannual reports of excess emissions and monitoring systems with all measurements over any three hour period (e.g., of low pressure) that average more than 10 percent below the averages during the most recent performance test.

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