**SUPPORTING STATEMENT**

 **ENVIRONMENTAL PROTECTION AGENCY**

**NESHAP for Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS) (Renewal)**

**1. Identification of the Information Collection**

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

NESHAP for Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS) (Renewal), EPA ICR Number 2040.07, OMB Control Number 2060-0515.

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

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS) were proposed on June 20, 2002, and promulgated on April 16, 2003. These regulations apply to each refractory products manufacturing facility which produces refractory bricks, refractory shapes, monolithics, kiln furniture, crucibles, and other materials used as linings for boilers, kilns, and other processing units and equipment where extreme temperature, corrosions, and abrasion would destroy other materials. These regulations apply to existing facilities and new facilities that manufacture refractory products and use organic hazardous air pollutant (HAP), chromium refractory, and clay refractory products. 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 SSSSS.

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 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 NESHAP.

Any owner/operator subject to the provisions of this part shall maintain a file containing these documents 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. If there is no such delegated authority, the reports are sent directly to the U.S. Environmental Protection Agency (EPA) regional office.

The ‘burden’ to the “Affected Public” may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS) (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 – NESHAP for Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS) (Renewal).

There are approximately 8 refractory products manufacturing facilities, which are owned and operated by the refractory products manufacturing industry. None of these 8 facilities in the United States are owned by either state, local, tribal or 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 8 affected facilities 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 8 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 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 112 of the Clean Air Act, as amended, to establish standards of performance for each category or subcategory of major sources and area sources of hazardous air pollutants. These standards are applicable to new or existing sources of hazardous air pollutants and shall require the maximum degree of emission reduction. 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, HAP emissions from refractory products manufacturing either cause or contribute to air pollution that may reasonably be anticipated to endanger public health and/or welfare. Therefore, the NESHAP were promulgated for this source category at 40 CFR Part 63,Subpart SSSSS.

**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 the standard 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, that 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 63, Subpart SSSSS.

**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* (83 FR 24785) on May 30, 2018. 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 8 respondents will be subject to these standards over the three-year period covered by this ICR.

Industry trade association(s) and other interested parties were provided an opportunity to comment on the burden associated with these standard as it was 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 Refractories Institute, at (216) 241-7333, and the Allied Mineral Products, at (614) 876-0244.

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.

**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.

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 these standards. EPA believes that the five-year records retention requirement is consistent with the Part 70 permit program and the five-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. EPA has found that the most flagrant violators have violations extending beyond five years. In addition, EPA would be prevented from pursuing the violators due to the destruction or nonexistence of essential records.

**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 refractory products manufacturing facilities. 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:

|  |  |  |
| --- | --- | --- |
| **Standard** **(40 CFR Part 63, Subpart SSSSS)** | **SIC Codes** | **NAICS Codes** |
| Clay refractories | 3255 | 327120 |
| Nonclay refractories  | 3297 | 327120 |

**4(b) Information Requested**

**(i) Data Items**

In this ICR, all the data that are recorded or reported is required by the NESHAP for Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS).

A source must make the following reports:

| **Notifications** |
| --- |
| Initial notification | §63.9(b)(2), §63.5, §63.9812(b)-(c) |
| Notification of performance test | §63.7(b)-(c), §63.9(e), and §63.9812(d) |
| Notification of compliance status | §63.9(h), §63.10(d)(2), and §63.9812(e) |
| Notification of alternative fuel use | §63.9812(f) |

| **Reports** |
| --- |
| Report of alternative fuel use | §63.9814(g) |
| Startup, shutdown, malfunction | §63.10(d)(5), §63.9814(c)(4) |
| No deviations/no continuous monitoring system (CMS) out of control | §63.9814(c)(5)-(6) |
| Deviations/out of control CMS | §63.9814(d)-(f) |

A source must keep the following records:

| **Recordkeeping** |
| --- |
| Record of startup, shutdown, and malfunctions | §63.6(e)(3), §63.10(b)(2), §63.9816(a)(2) |
| Records of performance tests | §63.10(b)(2)(viii), §63.9816(a)(3) |
| Initial notification or notification of compliance status | §63.10(b)(2)(xiv), §63.9816(a)(1) |
| Record of each CMS | §63.8(d)(3), §63.8(f)(6)(i), §63.8(g), §63.10(b)(2)(vi)-(xi), and §63.9816(c) |
| Records are required to be retained for five years | §63.10(b)(1) |

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 CEMS for THC, or CMS for temperature, flow rate, pH, or pressure drop and liquid supply pressure for control device. |
| Perform initial performance test, Reference Method 25A or 26A test, 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 five years.

**5(c) Small Entity Flexibility**

The 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 Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS) (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 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 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 record-keeping and reporting requirements is estimated to be 306 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 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:

Managerial $147.40 ($70.19 + 110%)

Technical $117.92 ($56.15 + 110%)

Clerical $57.02 ($27.15 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2018, “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 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 parameter monitoring system a | $16,820 | 0 | $0 | $380 | 8 | $3,040 |
| **Total (rounded) b** |  |  |  |  |  | **$3,040** |

 a It is assumed that no existing sources have installed CEMS.

b 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 $3,040. 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 $3,040.

 **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 $8,530.

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

 Managerial $65.71 (GS-13, Step 5, $41.07 + 60%)

 Technical $48.75 (GS-12, Step 1, $30.47 + 60%)

 Clerical $26.38 (GS-6, Step 3, $16.49 + 60%)

These rates are from the Office of Personnel Management (OPM), 2018 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 – NESHAP for Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS) (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 eight 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 8 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 | 8 | 0 | 0 | 8 |
| 2 | 0 | 8 | 0 | 0 | 8 |
| 3 | 0 | 8 | 0 | 0 | 8 |
| Average | 0 | 8 | 0 | 0 | 8 |

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 8.

 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 applicability | 0 | 1 | 0 | 0 |
| Notification of construction/reconstruction | 0 | 1 | 0 | 0 |
| Notification of anticipated startup | 0 | 1 | 0 | 0 |
| Notification of actual startup | 0 | 1 | 0 | 0 |
| Notification of performance test | 0 | 1 | 0 | 0 |
| Notification of compliance status | 0 | 1 | 0 | 0 |
| Notification of intent to use alternative fuel | 3 | 1 | 0 | 3 |
| Report of deviations | 1 | 1 | 0 | 1 |
| Report of no deviations | 7 | 2 | 0 | 14 |
| Startup, shutdown, malfunction report | 1 | 1 | 0 | 1 |
| Report of alternative fuel use | 3 | 1 | 0 | 3 |
|  |  |  | Total | 22 |

The number of Total Annual Responses is 22.

 The total annual labor costs are $34,800. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS) (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 below in Tables 1 and 2, respectively, and summarized below.

**(i) Respondent Tally**

The total annual labor hours are 306 hours. Details regarding these estimates may be found below in Table 1. Annual Respondent Burden and Cost – NESHAP for Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS) (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 14 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are $3,040. 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 179 labor hours at a cost of $8,530; see below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS) (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 decrease in burden from the most-recently approved ICR is not due to any program changes. The decrease in burden is due to correction of a mathematical error in the prior ICR, which inadvertently double-counted the burden for respondents to read and re-familiarize themselves with the rule requirements annually. This ICR updates the burden estimate for this requirement from 4.5 hours to 0.5 hours per respondent. The overall result is a decrease in the burden hours. There was no change in the capital/startup and O&M costs.

**6(g) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 14 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-OECA-2014-0088. 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-2014-0088 and OMB Control Number 2060-0515 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 Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS) (Renewal)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Burden item** | **(A)** | **(B)** | **(C)** | **(D)** | **(E)** | **(F)** | **(G)** | **(H)** |
|  | **Person-hours per occurrence** | **No. of occurrences per respondent per year** |  **Person-hours per respondent per year (C=AxB)** | **Respondents per year a** | **Technical person-hours per year (E=CxD)** | **Management person-hours per year (Ex0.05)** | **Clerical person-hours per year (Ex0.1)** | **Cost, $ b** |
| 1. Applications | N/A |   |   |   |   |   |   |   |
| 2. Survey and Studies | N/A |   |   |   |   |   |   |   |
| 3. Reporting Requirements |   |   |   |   |   |   |   |   |
| A. Familiarization with rule requirements | 0.5 | 1 | 0.5 | 8 | 4 | 0.2 | 0.4 | $523.97  |
| B. Required activities |   |   |   |   |   |   |   |   |
| Develop a startup, shutdown, malfunction plan | 32 | 1 | 32 | 0 | 0 | 0 | 0 | $0  |
| Develop an operation, maintenance, monitoring plan | 32 | 1 | 32 | 0 | 0 | 0 | 0 | $0  |
| Initial performance tests and reports | 24 | 1 | 24 | 0 | 0 | 0 | 0 | $0  |
| Initial CEMS demonstration c | 229 | 1 | 229 | 0 | 0 | 0 | 0 | $0  |
|  Quarterly Appendix F audits of CEMS (THC) c |   |   |   |   |   |   |   |   |
|  a) RATA audit (one per year)  | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0  |
|  b) RAA audit (three per year)  | 4 | 3 | 12 | 0 | 0 | 0 | 0 | $0  |
|  c) Daily calibration and operation | 1 | 365 | 365 | 0 | 0 | 0 | 0 | $0  |
| C. Create information | See 3B |   |   |   |   |   |   |   |
| D. Gather existing information | See 3B |   |   |   |   |   |   |   |
| E. Write report |   |   |   |   |   |   |   |   |
| Notification of applicability | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
| Notification of construction/reconstruction | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
| Notification of anticipated startup  | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
| Notification of actual startup | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
| Notification of performance test  | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
| Notification of compliance status  | 16 | 1 | 16 | 0 | 0 | 0 | 0 | $0  |
| Notification of intent to use alternative fuel d  | 2 | 1 | 2 | 3 | 6 | 0.3 | 0.6 | $785.95 |
| Report of deviations e | 16 | 1 | 16 | 1 | 16 | 0.8 | 1.6 | $2,095.87 |
| Report of no deviations f | 8 | 2 | 16 | 7 | 112 | 5.6 | 11.2 | $14,671.10 |
| Startup, shutdown, malfunction report g  | 8 | 1 | 8 | 1 | 8 | 0.4 | 0.8 | $1,047.94 |
| Report of alternative fuel use h | 4 | 1 | 4 | 3 | 12 | 0.6 | 1.2 | $1,571.90 |
| ***Subtotal for Reporting Requirements*** |  |  |  |  | ***182*** | ***$20,697*** |
| 4. Recordkeeping Requirements |   |   |   |   |   |   |   |   |
| A. Familiarization with rule requirements  | See 3A |  |  |  |  |  |  |  |
| B. Plan activities | See 4E |   |   |   |   |   |   |   |
| C. Implement activities  | See 4E |   |   |   |   |   |   |   |
| D. Develop record system | See 4E |   |   |   |   |   |   |   |
| E. Time to enter information |   |   |   |   |   |   |   |   |
| Records of all information required by standards i | 0.25 | 52 | 13 | 8 | 104 | 5.2 | 10.4 | $13,623.17 |
| F. Time to train personnel | 20 | 1 | 20 | 0 | 0 | 0 | 0 | $0  |
| G. Time to adjust existing ways to comply with previously applicable requirements  | N/A |   |   |   |   |   |   |   |
| H. Time to transmit or disclose information j  | 0.25 | 2 | 0.5 | 8 | 4 | 0.2 | 0.4 | $523.97  |
| I. Time for audits  | N/A |   |   |   |   |   |   |   |
| ***Subtotal for Recordkeeping Requirements*** |  |  |  |  | ***124*** | ***$14,147*** |
| **TOTAL ANNUAL BURDEN AND COSTS (rounded): k** |   |   |   |   | **306** | **$34,800** |
| **TOTAL CAPITAL/O&M COST (rounded): k** |  |  |  |  |  |  |  | **$3,040** |
| **GRAND TOTAL (rounded): j** |  |  |  |  |  |  |  | **$37,800** |
| **Assumptions:** |
| a We have assumed that the average number of respondents that will be subject to the rule will be eight. There will be no additional new source per year that will become subject to the rule over the three-year period of this ICR.  |
| b This ICR uses the following labor rates: $149.35 per hour for Executive, Administrative, and Managerial labor; $112.98 per hour for Technical labor, and $54.81 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2018, “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 there are no existing respondents required to comply using THC CEMS. |
| d We have assumed that three respondents will use alternative fuel once per year and will have to submit notification of intent to use alternative fuel. |
| e We have assumed that one respondent will report a deviation once a year. |
| f We have assumed that seven respondents will report no deviations on a semiannual basis. |
| g It is assumed that one respondent will have a startup, shutdown, malfunction (SSM) occur and be required to submit an immediate SSM report. |
| h We have assumed that three respondents will report on alternative fuel usage once a year. |
| i We have assumed that information will be recorded once per week for 52 weeks per year. |
| j We have assumed that it will take 0.25 hours for information to be transmitted or disclosed. |
| k Totals have been rounded to 3 significant values. Figures may not add exactly due to rounding. |

**Table 2: Average Annual EPA Burden and Cost – NESHAP for Refractory Products Manufacturing (40 CFR Part 63, Subpart SSSSS) (Renewal)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **(A)** | **(B)** | **(C)** | **(D)** | **(E)** | **(F)** | **(G)** | **(H)** |
|  | **EPA person-hours per occurrence** | **No. of occurrences per plant per year** | **EPA person-hours per plant per year (C=AxB)** | **Plants per year a** | **Technical person-hours per year (E=CxD)** | **Management person-hours per year (Ex0.05)** | **Clerical person-hours per year (Ex0.1)** | **Cost, $ b** |
| Attend initial performance test | 40 | 1 | 40 | 0 | 0 | 0 | 0 | $0  |
| Attend repeat performance test |   |   |   |   |   |   |   |   |
| Retesting preparation | 8 | 1 | 8 | 0 | 0 | 0 | 0 | $0  |
| Retesting | 40 | 1 | 40 | 0 | 0 | 0 | 0 | $0  |
| Report Review |   |   |   |   |   |   |   |   |
| Notification of applicability | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
| Notification of construction/reconstruction | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
| Notification of anticipated startup | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
| Notification of actual startup | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
| Notification of initial performance test | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
| Notification of compliance status  | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
| Notification of intent to use alternative fuel c | 2 | 1 | 2 | 3 | 6 | 0.3 | 0.6 | $328.04  |
| Repeat performance test report  | 40 | 1 | 40 | 0 | 0 | 0 | 0 | $0  |
| Semiannual compliance reports |   |   |   |   |   |   |   |   |
| Deviation d | 16 | 1 | 16 | 1 | 16 | 0.8 | 1.6 | $874.78  |
| No Deviation e | 8 | 2 | 16 | 7 | 112 | 5.6 | 11.2 | $6,123.43  |
| Startup, shutdown, malfunction report f | 16 | 1 | 16 | 1 | 16 | 0.8 | 1.6 | $874.78  |
| Notification of alternative fuel use g | 2 | 1 | 2 | 3 | 6 | 0.3 | 0.6 | $328.04  |
| **TOTAL ANNUAL BURDEN AND COST (rounded) h** |   |   |   |   | **179** | **$8,530**  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Assumptions:** |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a  We have assumed that the average number of respondents that will be subject to the rule will be eight. There will be no additional new source per year that will become subject to the rule over the three-year period of this ICR. |
| b  This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for government overhead expenses: Managerial rate of $65.71 (GS-13, Step 5, $41.07 x 1.6), Technical rate of $48.75 (GS-12, Step 1, $30.47 x 1.6), and Clerical rate of $26.38 (GS-6, Step 3, $16.49 x 1.6). These rates are from the Office of Personnel Management (OPM) “2018 General Schedule” which excludes locality rates of pay. |
| c We have assumed that three respondents will use alternative fuel once per year and will have to submit notification of intent to use alternative fuel. |
| d We have assumed that one respondent will report deviations once a year. |  |  |
| e We have assumed that seven respondents will report no deviation on a semiannual basis. |  |  |  |
| f It is assumed that one respondent will have a startup, shutdown, or malfunction occur. |  |  |  |  |
| g  We have assumed that three respondents will report on alternative fuel usage once a year. |  |  |  |  |
| h Totals have been rounded to 3 significant values. Figures may not add exactly due to rounding. |  |