**SUPPORTING STATEMENT**

 **ENVIRONMENTAL PROTECTION AGENCY**

**NESHAP for Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N) (Renewal)**

**1. Identification of the Information Collection**

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

NESHAP for Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N) (Renewal), EPA ICR Number 1081.12, OMB Control Number 2060-0043.

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

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N) were proposed on July 20, 1983, promulgated on August 4, 1986, and amended on: October 3, 1986; May 31, 1990; February 12, 1999; October 17, 2000; February 12, 1999; and February 27, 2014. These regulations apply to each existing and new glass melting furnace that uses commercial arsenic as a raw material located at a glass manufacturing plant. These standards do not apply to pot furnaces; in addition, the standards do not consider re-bricking as construction or modification for the purposes of 40 CFR Section 61.05(a). New facilities include those that commenced construction or reconstruction after the date of proposal. This information is being collected to assure compliance with 40 CFR Part 61, Subpart N.

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 two 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.

All the glass manufacturing facilities in the United States are owned and operated by the glass manufacturing industry (aka: the “Affected Public”). None of the facilities in the United States are owned by either state, local, tribal or the Federal government. They are all privately-owned, for-profit businesses. We assume that they will all respond to EPA inquiries. The “burden” to the Affected Public may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N) (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 Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N) (Renewal).

Over the next three years, approximately 16 respondents per year will be subject to these standards, and no additional respondents per year will become subject to these same standards.

The active (previous) ICR had the following Terms of Clearance (TOC):

In accordance with 5 CFR 1320, the information collection is approved for three years.

EPA has addressed each item of concern in the TOC by renewing this ICR at the end of the three-year approval period.

**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, arsenic emissions from glass manufacturing plants 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 61,Subpart N.

**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 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 the standard is 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 61, Subpart N.

**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.

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 has been reviewed previously to determine the minimum information needed for compliance purposes. In developing this ICR, we contacted both the Glass Manufacturing Industry Council, at (614) 523-3033, and the National Glass Association, at (703) 442-4890.

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 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 glass manufacturing 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) code are listed below.

|  |  |  |
| --- | --- | --- |
| **Standard (40 CFR Part 61, Subpart N)**  | **SIC Codes** | **NAICS Codes** |
| Flat Glass Manufacturing | 3211 | 327211 |
| Glass Container Manufacturing | 3221 | 327213 |
| Other Pressed and Blown Glass and Glassware Manufacturing | 3229 | 327212 |
| Mineral Wool Manufacturing | 3296 | 327993 |

**4(b) Information Requested**

**(i) Data Items**

In this ICR, all the data that is recorded or reported is required by the NESHAP for Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N).

A source must make the following reports:

| **Notifications** |
| --- |
| Notification and application of construction or modification | 61.06, 61.07 |
| Notification of anticipated date of initial startup | 61.09(a)(1) |
| Notification of actual startup | 61.09(a)(2) |
| Notification of initial performance emissions test | 61.13(c), 61.165(d)(1) |

| **Reports** |
| --- |
| Source status report | 61.10(a) |
| Report initial performance emissions test results | 61.13(f), 61.165(d)(2) |
| Report of arsenic emission estimates | 61.165(d)(3) |
| Report of uncontrolled arsenic emission rates | 61.165(d)(4) |
| Request approval of control device bypass | 61.165(e) |
| Report of results of continuous monitoring system (CMS) evaluation | 61.165(f)(1) |
| Semiannual report of excess emissions (opacity) | 61.165(f)(2) |

A source must keep the following records:

| **Recordkeeping** |
| --- |
| Record continuous opacity and temperature of gas entering control device | 61.165(a)(1) |
| Records of emission test results and other data needed to determine emissions | 61.13(g), 61.165(a)(2) |
| Records of CMS performance evaluations, including calibration checks and adjustments | 61.165(a)(3) |
| Occurrence and duration of each startup, shutdown, and malfunction of furnace | 61.165(a)(4) |
| Malfunction of air pollution control device | 61.5165(a)(5) |
| Periods when monitors are inoperative | 61.165(a)(6) |
| Maintenance and repair of control device, CMS or monitor | 61.165(a)(7) |
| Records of approved control device bypass and steps taken to minimize arsenic emissions during the period the control device was bypassed | 61.165(b) |
| Semiannual records of uncontrolled arsenic emission rate | 61.165(c) |
| Records are required to be retained for two years | 61.14(f), 61.165(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.

**(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 wet scrubber. |
| Perform initial performance test, Reference Method 1, 2, 3, 5D, and 108 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**

The number of small entities affected by this rule could not be determined, based on review of the following sources: the promulgated rule notice in the Federal Register (51 FR 27956) on August 4, 1986; the Inorganic Arsenic Emissions from Glass Manufacturing Plants Background Information for Proposed Standards (1983); and a search of publicly available current data sources. Based on the Background Information document, about 70 percent of glass plants are considered to be small firms; however, arsenic usage by these small firms is not known.

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 Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N) (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 recordkeeping and reporting requirements is estimated to be 3,100 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 $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 these regulations. The annual operation and maintenance costs are the ongoing costs to maintain the monitor and such other costs 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 Monitor | N/A | N/A | $0 | $3,000 | 16 | $48,000 |
| Temperature Monitor | N/A | N/A | $0 | $500 | 16 | $8,000 |
| **Totals** |  |  | **$0** |  |  | **$56,000** |

 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 $56,000. 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 $56,000. These are the costs of recordkeeping.

**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 $10,700.

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 Federal government employees. Details upon which this estimate is based appear below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N).

**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 16 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 16 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 | 16 | 0 | 0 | 16 |
| 2 | 0 | 16 | 0 | 0 | 16 |
| 3 | 0 | 16 | 0 | 0 | 16 |
| Average | 0 | 16 | 0 | 0 | 16 |

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 16.

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 |
| Application of construction or modification | 0 | 1 | 0 | 0 |
| Notification of anticipated startup | 0 | 1 | 0 | 0 |
| Notification of actual startup | 0 | 1 | 0 | 0 |
| Notification of initial performance test | 0 | 1 | 0 | 0 |
| Source status report | 0 | 1 | 0 | 0 |
| Report of performance test results | 0 | 1 | 0 | 0 |
| Report of arsenic emission estimates | 15 | 2 | 0 | 30 |
| Report of uncontrolled arsenic emission rates | 15 | 2 | 0 | 30 |
| Request for approval of control device bypass  | 1 | 1 | 0 | 1 |
| CMS evaluation results report | 0 | 1 | 0 | 0 |
| Semiannual excess emissions report | 1 | 2 | 0 | 2 |
|  |  |  | Total | 63 |

The number of Total Annual Responses is 63.

The total annual labor costs are $326,000. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N).

**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 3,100 hours. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N).

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 49 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are $56,000. 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 228 labor hours at a cost of $10,700; see below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N).

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 no change in labor hours or cost in this ICR compared to the previous ICR. This is due to two considerations: 1) the regulations have not changed over the past three years and are not anticipated to change over the next three years; and 2) the growth rate for the industry is very low or non-existent, so there is no significant change in the overall burden.

**6(g) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 49 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-2014-0038. 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-2014-0038 and OMB Control Number 2060-0043 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 Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N) (Renewal)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Burden item** | **(A)** | **(B)** | **(C)** | **(D)** | **(E)** | **(F)** | **(G)** | **(H)** |
| **Technical Person-hours per occurrence** | **No. of occurrences per respondent per year** | **Technical Person-hours per respondent per year(C=AxB)** | **Respondents per year a** | **Technical person-hours per year(E=CxD)** | **Management person-hours per year(F=Ex0.05)** | **Clerical person-hours per year (G=Ex0.1)** | **Total Cost per year ($) b** |
| 1. Applications | N/A |   |   |   |   |   |   |   |
| 2. Survey and Studies | N/A |   |   |   |   |   |   |   |
| 3. Reporting requirements |   |   |   |   |   |   |   |   |
| A. Familiarize with regulatory requirements c | 1 | 1 | 1 | 16 | 16 | 0.8 | 1.6 | $1,933.29  |
| B. Required Activities | N/A |   |   |   |   |   |   |   |
| Initial performance emission tests d | 80 | 1 | 80 | 0 | 0 | 0 | 0 | $0  |
| Repeat of performance emission tests d | 80 | 0.2 | 16 | 0 | 0 | 0 | 0 | $0  |
| C. Create information | See 3B |   |   |   |   |   |   |   |
| D. Gather existing information | See 3B |   |   |   |   |   |   |   |
| E. Write report |   |   |   |   |   |   |   |   |
| Application of construction or modification | 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  |
| Source status report | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
| Notification of initial performance emission test  | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0  |
| Report of initial performance emission test  | See 3B |   |   |   |   |   |   |   |
| Report results of continuous monitoring system (CMS) evaluation | See 3B |   |   |   |   |   |   |   |
| Report of arsenic emission estimates e | 16 | 2 | 32 | 15 | 480 | 24 | 48 | $57,998.64  |
| Report of uncontrolled arsenic emission rates f   | 8 | 2 | 16 | 15 | 240 | 12 | 24 | $28,999.32  |
| Request approval of control device bypass g | 6 | 1 | 6 | 1 | 6 | 0.3 | 0.6 | $724.98  |
| Semiannual excess emissions (opacity) h | 16 | 2 | 32 | 1 | 32 | 1.6 | 3.2 | $3,866.58  |
| ***Subtotal for Reporting Requirements*** |   |   |   |   | **890** | **$93,523**  |
| 4. Recordkeeping Requirements |   |   |   |   |   |   |   |   |
| A. Familiarize with regulatory requirements | See 3A |   |   |   |   |   |   |   |
| B. Plan activities | See 3B |   |   |   |   |   |   |   |
| C. Implement activities | See 3B |   |   |   |   |   |   |   |
| D. Develop record system | N/A |   |   |   |   |   |   |   |
| E. Time to enter information i  | 40 | 1 | 40 | 16 | 640 | 32 | 64 | $77,331.52  |
| Record continuous opacity and temperature of gas entering control device | See 4E |   |   |   |   |   |   |   |
| Records of emission test results | See 4E |   |   |   |   |   |   |   |
| Records of CMS performance evaluations | See 4E |   |   |   |   |   |   |   |
| Occurrence and duration of startup, shutdown, and malfunction of furnace | See 4E |   |   |   |   |   |   |   |
| Records of malfunction of control device | See 4E |   |   |   |   |   |   |   |
| Periods when monitors are inoperative | See 4E |   |   |   |   |   |   |   |
| Maintain and repair of control device, CMS, or monitors | See 4E |   |   |   |   |   |   |   |
| Records of approved control device bypass | See 4E |   |   |   |   |   |   |   |
| Semiannual records of uncontrolledarsenic emission rate j | 40 | 2 | 80 | 16 | 1,280 | 64 | 128 | $154,663.04  |
| F. Time to train personnel | N/A |   |   |   |   |   |   |   |
| G. Time for audits | N/A |   |   |   |   |   |   |   |
| ***Subtotal for Recordkeeping Requirements*** |   |   |   |   | **2,208** | **$231,995**  |
| **TOTAL LABOR BURDEN AND COST (rounded) k** |   |   |   |   | **3,100** | **$326,000**  |
| **TOTAL CAPITAL AND O&M COST (rounded) k** |   |   |   |   |   |   |   | **$56,000**  |
| **GRAND TOTAL (rounded) k** |   |   |   |   |   |   |   | **$382,000**  |

**Assumptions:**

a We have assumed that there are 16 existing sources, and that no additional new sources will become subject to the rule over the next three years.

b This ICR uses the following labor rates: $144.33 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 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 all respondents will have to familiarize with the regulatory requirements each year.

d We have assumed that it will take eighty hours to complete performance tests and 20% of sources will have to repeat performance tests.

e We have assumed that fifteen respondents will write report of arsenic emission estimates on a semiannual basis.

f We have assumed that fifteen respondents will write report of uncontrolled arsenic emission rates on a semiannual basis.

g We have assumed that one respondent will write report requesting approval of control device bypass once a year.

h We have assumed that one respondent will write an excess emissions report semiannually.

i It will take each respondent forty hours to enter information.

j It will take each respondent forty hours twice a year to record uncontrolled arsenic emission rate.

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 Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N) (Renewal)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Burden Item** | **(A)** | **(B)** | **(C)** | **(D)** | **(E)** | **(F)** | **(G)** | **(H)** |
| **Technical Person-hours per occurrence** | **No. of occurrences per year** | **Technical Person-hours per Plant per year (C=AxB)** | **Respondents per year a** | **Technical person-hours per year(E=CxD)** | **Management person-hours per year(F=Ex0.05)** | **Clerical person-hours per year (G=Ex0.1)** | **Total Cost per year b** |
| Activities |  |  |  |  |  |  |  |  |
| New facility |  |  |  |  |  |  |  |  |
| Initial performance test c | 24 | 1 | 24 | 0 | 0 | 0 | 0 | $0  |
| Repeat performance test d | 24 | 0.2 | 4.8 | 0 | 0 | 0 | 0 | $0  |
| Review reports  |   |   |   |   |   |   |   |   |
| New facility |   |   |   |   |   |   |   |   |
| Construction or modification application | 0.5 | 1 | 0.5 | 0 | 0 | 0 | 0 | $0  |
| Notification of anticipated startup | 0.5 | 1 | 0.5 | 0 | 0 | 0 | 0 | $0  |
| Notification of actual startup | 0.5 | 1 | 0.5 | 0 | 0 | 0 | 0 | $0  |
| Source status report | 0.5 | 1 | 0.5 | 0 | 0 | 0 | 0 | $0  |
| Notification of initial performance emissions test | 0.5 | 1 | 0.5 | 0 | 0 | 0 | 0 | $0  |
| Report of initial performance emissions test results | 8 | 1 | 8 | 0 | 0 | 0 | 0 | $0  |
| Notification of physical or operational change | 0.5 | 1 | 0.5 | 0 | 0 | 0 | 0 | $0  |
| Notification of emissions test | 0.5 | 1 | 0.5 | 0 | 0 | 0 | 0 | $0  |
| Report results of CMS evaluation | 8 | 1 | 8 | 0 | 0 | 0 | 0 | $0  |
| Existing facility |   |   |   |   |   |   |   |   |
| Report of arsenic emission estimates rates e | 4 | 1 | 4 | 15 | 60 | 3 | 6 | $3,235.32  |
| Reports of uncontrolled arsenic emission rates f | 8 | 1 | 8 | 15 | 120 | 6 | 12 | $6,470.64  |
| Semiannual excess emissions g | 6 | 2 | 12 | 1 | 12 | 0.6 | 1.2 | $647.06  |
| Request approval of control device bypass h | 6 | 1 | 6 | 1 | 6 | 0.3 | 0.6 | $323.53  |
| **TOTAL LABOR BURDEN AND COST (rounded) i** |  |  |  |  | **228** | **$10,700**  |

**Assumptions:**

a We have assumed that there are 16 existing sources, and that no additional new sources will become 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 (GS-13, Step 5, $40.50 + 60%) for managerial, $48.08 (GS-12, Step 1, $30.05 + 60%) for Technical, and $26.02 (GS-6, Step 3, $16.26 + 60%) for 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 twenty four hours to perform initial performance test.

d We have assumed that 20% of sources will take twenty four hours to repeat performance test.

e We have assumed that reports submitted by the fifteen respondents will be reviewed once a year. These reports are submitted semiannually.

f We have assumed that it will take eight hours to review reports of uncontrolled arsenic emission rates once a year. These reports are submitted semiannually.

g It is required that excess emissions reports are reviewed on a semiannual basis.

h We have assumed that the report requesting approval of control device bypass will be reviewed once a year.

i Totals have been rounded to 3 significant values. Figures may not add exactly due to rounding.