# 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 1081.10, 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 were proposed on July 20, 1983, and promulgated on August 4, 1986. The standards were amended on both May 31, 1990 and October 17, 2000. These standards apply to each glass melting furnace that uses commercial Arsenic as a raw material. These standards do not apply to pot furnaces. Also, re-bricking is not considered construction or modification for the purposes of 40 CFR Section 61.05(a). 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 sources subject to NESHAP.

Any owner/operator subject to the provisions of this part will maintain a file of these measurements, and retain the file for at least two years following the date of such measurements, maintenance reports, and records. All reports 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.

Based on consultation with industry representatives during a previous renewal of this ICR, there is an average of one affected facility at each plant site and each plant site has only one respondent (i.e., the owner/operator of the plant site).

Over the next three years, an average of 16 respondents per year will be subject to the standard, and no additional respondents per year will become subject to the standard.

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

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 burden to the "Federal Government" is attributed entirely to work performed by either Federal employees or government contractors; this burden 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).

#### 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 (HAP). These standards are applicable to new or existing sources of (HAP) 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 or welfare. Therefore, the NESHAP was 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 the 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 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 ensure that 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 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 a local agency can be sent to the Administrator in lieu of the report required by the Federal standards. Therefore, no duplication exists.

## 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 <u>Federal Register</u> (76 <u>FR</u> 26900) on May 9, 2011. No comments were received on the burden published in the <u>Federal Register</u>.

#### **3(c)** Consultations

The Agency's industry experts were consulted, and the Agency's internal data sources and projections of industry growth over the next three years were considered during a previous renewal of this ICR. The primary source of information as reported by industry, in compliance with the recordkeeping and reporting provisions in the standard, was the Online Tracking Information System (OTIS) which is operated and maintained by the EPA Office of Compliance. OTIS is the EPA database for the collection, maintenance, and retrieval of all compliance data. The growth rate for the industry was based on our consultations with the Agency's internal industry experts. We estimated that approximately 16 respondents would be subject to the standard over the three-year period covered by this ICR.

Industry trade association and other interested parties were provided an opportunity to comment on the burden associated with the standard as it was being developed and the standard has been previously reviewed to determine the minimum information needed for compliance purposes. For this renewal, we consulted with: 1) the Glass Industry Consulting International,

at (949) 493-7293; 2) the Glass Manufacturing Industry Council, at (614) 818-9423: and 3) the National Glass Association at (866) 342-5642. No comments were received on this ICR.

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 the standards. Requirements for information gathering and recordkeeping are useful techniques to ensure that good operation and maintenance practices are applied and emission limitations are met. If the information required by these standards was collected less frequently, the proper operation and maintenance of control equipment and the possibility of detecting violations would be less likely.

### 3(e) General Guidelines

These reporting or recordkeeping requirements do not violate any of the regulations promulgated by OMB at 5 CFR part 1320, section 1320.5.

These standards require the respondents to maintain all records, including reports and notifications for at least five years. This is consistent with the General Provisions as applied to the standards. 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 the 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 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 glass manufacturing plants. The Standard Industrial Classification (SIC) codes for the respondents affected by the standards, which correspond to the North American Industry Classification System (NAICS) codes, are listed below for glass manufacturing plants.

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

These reporting or recordkeeping requirements do not violate any of the regulations promulgated by OMB at 5 CFR part 1320, section 1320.5.

## (i) Data Items

In this ICR, all the data that are recorded or reported are 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	60.13(c), 61.165(d)(2)						

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	61.165(a)(3)						
Occurrence and duration of 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	61.165(b)						
Semiannual records of uncontrolled arsenic emission rate	61.165(c)						
Records are required to be retained for two (2) years	61.14(f)						

## **Electronic Reporting**

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

Also, regulatory agencies, in cooperation with the respondents, continue to create reporting systems to transmit data electronically. However, electronic reporting systems are still not widely used. At this time, it is estimated that approximately 10 percent of the respondents

#### (ii) Respondent Activities

### **Respondent Activities**

Read instructions.

Install, calibrate, maintain, and operate CMS for opacity, or for pressure drop and liquid supply pressure for wet scrubber.

Perform initial performance test, Reference Methods 1, 2, 3, 5D, and 108 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.

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

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

Transmit, or otherwise disclose the information.

Currently, sources are using automated monitoring equipment that provides parameter data in an automated way e.g., continuous parameter monitoring system. Although personnel at the sources still need to evaluate the data, this type of monitoring equipment has significantly reduced the burden associated with monitoring and recordkeeping.

# 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**

### **Agency Activities**

Observe initial performance tests and repeat performance tests if necessary.

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

Audit facility records.

Input, analyze, and maintain data in the Online Information Tracking System (OTIS).

### 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 entered into OTIS which is operated and maintained by EPA's Office of Compliance. OTIS is EPA's database for the collection, maintenance, and retrieval of compliance data for approximately 125,000 industrial and government-owned facilities. EPA uses OTIS 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. 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 <u>Federal Register</u> (51 <u>FR</u> 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 requirements the minimum 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. Wherever appropriate, specific tasks and major assumptions have been identified. Responses to this information collection are mandatory.

The Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number.

## 6(a) Estimating Respondent Burden

The average annual burden to industry over the next three years from these recordkeeping and reporting requirements is estimated to be 3,080 (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 \$121.42 (\$57.82 + 110%) Technical \$99.14 (\$47.21 + 110%) Clerical \$49.81 (\$23.72 + 110%)

These rates are from the U. S. Department of Labor, Bureau of Labor Statistics, September 2011, "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 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 and other costs such as photocopying and postage.

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

	Capital/Startup vs. Operation and Maintenance (O&M) Costs								
(A) Continuous Monitoring Device	(B) Capital/Startup Cost for One Respondent	(C) Number of New Respondents	(D) Total Capital/Startup Cost, (B X C)	(E) Annual O&M Costs for One Respondent	(F) Number of Respondents with O&M	(G) Total O&M, (E X F)			
Continuous Opacity 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			

The total capital/startup costs for this ICR are zero. 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.

## 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 \$4,457.

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

Managerial	\$62.27	(GS-13, Step 5, \$38.92 + 60%)
Technical	\$46.21	(GS-12, Step 1, \$28.88 + 60%)
Clerical	\$25.01	(GS-6, Step 3, \$15.63 + 60%)

These rates are from the Office of Personnel Management (OPM), 2011 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 Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N) (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 16 existing respondents will be subject to the standard. It is estimated that no additional respondents per year will become subject to the standard in the next three years. 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 which addresses the three years covered by this ICR.

linee year	Number of Respondents									
	Respondents That Submit Reports		Respondents That Do Not Submit Any Reports							
Year	(A) Number of New Respondents <sup>1</sup>	(B) Number of Existing Respondents	(C) Number of Existing Respondents That Keep Records but Do Not Submit Reports	(D)  Number of Existing Respondents That Are Also New Respondents	(E) Number of Respondents (E=A+B+C-D)					
1	0	16	0	0	16					
2	0	16	0	0	16					
3	0	16	0	0	16					
Average	0	16	0	0	16					

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 Responses E=(BxC)+D				
Application of construction or modification	0	0	N/A	0				
Notification of anticipated startup	0	0	N/A	0				

Total Annual Responses							
Notification of actual startup	0	0	N/A	0			
Source status report	0	0	N/A	0			
Notification of initial performance emission test	0	0	N/A	0			
Notification of physical or operation change	0	0	N/A	0			
Report of arsenic emission estimates	15	2	N/A	30			
Report of uncontrolled arsenic emission rates	15	2	N/A	30			
Request approval of control device bypass	1	1	N/A	1			
Semiannual excess emissions (opacity)	1	2	N/A	2			
			Total	63			

The number of Total Annual Responses is 63.

The total annual labor costs are \$295,094. 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) (Renewal).

## 6(e) Bottom Line Burden Hours 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, respectively, and summarized below.

## (i) Respondent Tally

The estimated annual burden is 3080 hours and \$295,094 in labor costs. 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) (Renewal).

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 99 labor hours at a cost of \$4,457. See below Table 2: Average Annual EPA Burden and Cost - NESHAP for Inorganic Arsenic Emissions from Glass Manufacturing Plants (40 CFR Part 61, Subpart N) (Renewal).

#### 6(f) Reasons for Change in Burden

There is a decrease in the labor hours to the respondents in this ICR compared to the previous ICR. This is due to a calculation error in the burden estimate for the previous ICR.

There is an increase in the total respondent and Agency costs as currently identified in the OMB Inventory of approved Burdens. This increase is not due to any program changes. The change in cost estimated reflects updated labor rates available from the Bureau of Labor Statistics.

#### **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 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's 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-2011-0245. An electronic version of the public docket is available at <a href="http://www.regulations.gov/">http://www.regulations.gov/</a> 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), EPA 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-2011-0245 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 (CFR Part 61, Subpart N) (Renewal)

Burden item	(A) Technical Person- hours per occurrence	(B) No. of occurrences per respondent per year	(C) Technical Person- hours per respondent per year (C=AxB)	(D) Respondents per year <sup>a</sup>	(E) Technical person- hours per year (E=CxD)	(F) Management person-hours per year (Ex0.05)	(G) Clerical person- hours per year (Ex0.1)	(H) Total person- hours per year	(I) Total Cost per year <sup>b</sup>
1. Applications	N/A								
2. Survey and Studies	N/A								
3. Reporting requirements									
A. Read Instructions <sup>c</sup>	1	1	1	0	0	0	0	0	\$0
B. Required Activities	N/A								
Initial performance emission tests <sup>d</sup>	80	1	80	0	0	0	0	0	\$0
Repeat of performance emission tests	80	0.2	16	0	0	0	0	0	\$0
C. Create information	Include	ed in 3B							
D. Gather existing information	Include	ed in 3B							
E. Write report									
Application of construction or modification	2	1	2	0	0	0	0	0	\$0
Notification of anticipated startup	2	1	2	0	0	0	0	0	\$0
Notification of actual startup	2	1	2	0	0	0	0	0	\$0
Source status report	2	1	2	0	0	0	0	0	\$0
Notification of initial performance emission test	2	1	2	0	0	0	0	0	\$0
Report of initial performance emission test	Include	ed in 3B							
Notification of physical or operation change	2	1	2	0	0	0	0	0	\$0
Report results of continuous monitoring	Include	ed in 3B							

Table 1: Annual Respondent Burden and Cost - NESHAP for Inorganic Arsenic Emissions from Glass Manufacturing Plants (CFR Part 61, Subpart N) (Renewal)

Burden item	(A) Technical Person- hours per occurrence	(B) No. of occurrences per respondent per year	(C) Technical Person- hours per respondent per year (C=AxB)	(D) Respondents per year <sup>a</sup>	(E) Technical person- hours per year (E=CxD)	(F) Management person-hours per year (Ex0.05)	(G) Clerical person- hours per year (Ex0.1)	(H) Total person- hours per year	(I) Total Cost per year <sup>b</sup>
system (CMS) evaluation									
Report of arsenic emission estimates <sup>e</sup>	16	2	32	15	480	24	48	552	\$52,892
Report of uncontrolled arsenic emission rates <sup>f</sup>	8	2	16	15	240	12	24	276	\$26,446
Request approval of control device bypass <sup>g</sup>	6	1	6	1	6	0.3	0.6	6.9	\$661
Semiannual excess emissions (opacity) h	16	2	32	1	32	1.6	3.2	36.8	\$3,526
Subtotal for Reporting Requirements								871.7	
4. Recordkeeping									
Requirements									
A. Read instructions		ed in 3A							
B. Plan activities		ed in 3B							
C. Implement activities		ed in 3B							
D. Develop record system	N/A								
E. Time to enter information <sup>i</sup>	40	1	40	16	640	32	64	736	\$70,523
Record continuous opacity and temperature of gas entering control device	Included in 4E								
Records of emission test results	Include	ed in 4E							
Records of CMS performance evaluations	Included in 4E								
Occurrence and duration of startup, shutdown, and malfunction of furnace	Include	ed in 4E							
Records of malfunction of	Include	ed in 4E							

Table 1: Annual Respondent Burden and Cost - NESHAP for Inorganic Arsenic Emissions from Glass Manufacturing Plants (CFR Part 61, Subpart N) (Renewal)

Burden item	(A) Technical Person- hours per occurrence	(B) No. of occurrences per respondent per year	(C) Technical Person- hours per respondent per year (C=AxB)	(D) Respondents per year <sup>a</sup>	(E) Technical person- hours per year (E=CxD)	(F) Management person-hours per year (Ex0.05)	(G) Clerical person- hours per year (Ex0.1)	(H) Total person- hours per year	(I) Total Cost per year <sup>b</sup>
control device									
Periods when monitors are inoperative	Include	ed in 4E							
Maintain and repair of									
control device, CMS, or	Include	ed in 4E							
monitors									
Records of approved control device bypass	Include	ed in 4E							
Semiannual records of uncontrolled arsenic emission rate <sup>j</sup>	40	2	80	16	1,280	64	128	1,472	\$141,046
F. Time to train personnel	N/A								
G. Time for audits	N/A								
Subtotal for Recordkeeping Requirements								2,208	
Total Reporting and Recordkeeping					2,678	134	268	3,079.7	\$295,094
TOTAL LABOR BURDEN AND COST (rounded)								3,080	\$295,094

#### **Assumptions:**

<sup>&</sup>lt;sup>a</sup> We have assumed that there are sixteen existing sources, and that no additional new sources will become subject to the rule over the next three years.

<sup>&</sup>lt;sup>b</sup> This ICR uses the following labor rates: \$121.42 per hour for Executive, Administrative, and Managerial labor; \$99.14 per hour for Technical labor, and \$49.81 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, September, 2011, "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.

<sup>&</sup>lt;sup>c</sup> We have assumed that it will take one hour to read instructions.

<sup>&</sup>lt;sup>d</sup> We have assumed that it will take eighty hours to complete performance test.

<sup>&</sup>lt;sup>e</sup> We have assumed that fifteen respondents will write report of arsenic emission estimates on a semiannual basis.

 $<sup>^{\</sup>mathrm{f}}$  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.

<sup>&</sup>lt;sup>i</sup> It will take each respondent forty hours to enter information.

<sup>&</sup>lt;sup>j</sup> It will take each respondent forty hours twice a year to record uncontrolled arsenic emission rate.

Table 2: Average Annual EPA Burden and Cost - NESHAP for Inorganic Arsenic Emissions from Glass Manufacturing Plants (CFR Part 61, Subpart N) (Renewal)

Burden Item	(A) Technical Person- hours per occurrence	(B) No. of occurrences per year	(C) Technical Person- hours per Plant per year (C=AxB)	(D) Respondents per year <sup>a</sup>	(E) Technical person- hours per year (E=CxD)	(F) Management person-hours per year (Ex0.05)	(G) Clerical person- hours per year (Ex0.1)	(H) Total Cost per year <sup>b</sup>
Initial performance test								
New facility <sup>c</sup>	24	1	24	0	0	0	0	\$0
Repeat performance test								
New facility <sup>d</sup>	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	4	1	4	15	60	3	6	\$3,109

Table 2: Average Annual EPA Burden and Cost - NESHAP for Inorganic Arsenic Emissions from Glass Manufacturing Plants (CFR Part 61, Subpart N) (Renewal)

Burden Item	(A) Technical Person- hours per occurrence	(B) No. of occurrences per year	(C) Technical Person- hours per Plant per year (C=AxB)	(D) Respondents per year <sup>a</sup>	(E) Technical person- hours per year (E=CxD)	(F) Management person-hours per year (Ex0.05)	(G) Clerical person- hours per year (Ex0.1)	(H) Total Cost per year <sup>b</sup>
emission estimates rates <sup>e</sup>								
Reports of uncontrolled arsenic emission rates <sup>f</sup>	8	1	8	1	8	0.4	0.8	\$415
Semiannual excess emissions <sup>g</sup>	6	2	12	1	12	0.6	1.2	\$622
Request approval of control device bypass <sup>h</sup>	6	1	6	1	6	0.3	0.6	\$311
Subtotals Labor Burden and Cost					86	4.3	8.6	\$4,457
TOTAL LABOR BURDEN AND COST (rounded)						99		\$4,457

#### **Assumptions:**

<sup>&</sup>lt;sup>a</sup> We have assumed that there are sixteen 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: \$62.27 for Managerial (GS-13, Step 5, \$38.92 x 1.6), \$46.21 for Technical (GS-12, Step 1, \$28.88 x 1.6) and \$25.01 Clerical (GS-6, Step 3, \$15.63 x 1.6). These rates are from the Office of Personnel Management (OPM) "2004 General Schedule" which excludes locality rates of pay.

<sup>&</sup>lt;sup>c</sup> We have assumed that it will take twenty four hours to perform initial performance test.

<sup>&</sup>lt;sup>d</sup> We have assumed that it will take twenty four hours to repeat performance test.

<sup>&</sup>lt;sup>e</sup> We have assumed that fifteen respondents will be required to review the report of arsenic emission estimates rates once a year.

 $<sup>^{\</sup>mathrm{f}}$  We have assumed that it will take eight hours to review reports of uncontrolled arsenic emission rates once a year.

 $<sup>^{\</sup>rm g}\,$  It is required that excess emissions reports are reviewed on a semiannual basis.

<sup>&</sup>lt;sup>h</sup> We have assumed that one respondent will review a report requesting approval of control device bypass once a year.