

**SUPPORTING STATEMENT  
ENVIRONMENTAL PROTECTION AGENCY**

**NESHAP for Primary Copper Smelters (40 CFR Part 63, Subpart QQQ) (Renewal)**

**1. Identification of the Information Collection**

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

NESHAP for Primary Copper Smelters (40 CFR Part 63, Subpart QQQ) (Renewal),  
EPA ICR Number 1850.08, OMB Control Number 2060-0476.

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

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Primary Copper Smelters (40 CFR Part 63, Subpart QQQ) were proposed on April 20, 1998, and promulgated on June 6, 2002. These regulations apply to each existing and new copper concentrate dryer, smelting furnace, slag cleaning vessel, copper converter department, and the entire group of fugitive emission sources located at a primary copper smelter facility that is a major source of hazardous air pollutant (HAP) emissions. Major sources of HAP emissions are sites that emit, or have the potential to emit, any single HAP at a rate of 9.07 megagrams (10 tons) or more per year or any combination of HAPs at a rate of 22.68 megagrams (25 tons) or more per year. 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 63, Subpart QQQ.

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. In the event there is no such delegated authority, the reports are sent directly to the U.S. Environmental Protection Agency (EPA) regional office.

All the primary copper smelter facilities in the United States are owned and operated by the primary copper smelter industry (aka: the "Affected Public"). None of these facilities in the United States are owned by any government entities, including state, local, tribal, and Federal governments. They are all privately-owned, for-profit commercial 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 Primary Copper Smelters (40 CFR Part 63, Subpart QQQ) (Renewal). The "burden" to the Federal Government is attributed entirely to work performed by either Federal employees or government contractors and

can be found below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Primary Copper Smelters (40 CFR Part 63, Subpart QQQ) (Renewal).

Based on our consultations with industry representatives, there are an average of 5.5 affected sources 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 3 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, HAP emissions from primary copper smelters 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 QQQ.

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

The notifications required in these standards are used to inform the Agency or delegated authority when a source becomes subject to the requirements of the regulations. The reviewing authority may then inspect the source to check if the pollution control devices are properly installed and operated, leaks are being detected and repaired, and that these same 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 QQQ.

#### **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 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.

Industry trade association(s) and other interested parties were provided an opportunity to comment on the burden associated with these standards as they were being developed and these same standards have been reviewed previously to determine the minimum information needed for compliance purposes. In developing this ICR, we contacted both: 1) the American Copper Council, at (518) 871-1062; and 2) the United States Geological Survey, at (888) 275-8747.

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.

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 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 primary copper smelters. The United States Standard Industrial Classification (SIC) code for the respondents affected by the standards is SIC 3331 which corresponds to the North American Industry Classification System (NAICS) 331410 for Nonferrous Metal (except Aluminum) Smelting and Refining.

### **4(b) Information Requested**

#### **(i) Data Items**

In this ICR, all the data that is recorded or reported is required by the NESHAP for Primary Copper Smelters (40 CFR Part 63, Subpart QQQ).

A source must make the following reports:

<b>Notifications</b>	
Initial notification	63.1454(a), 63.6(h) (4-5), 63.7(c) 63.8(f) (4), 63.9(b-d), 63.9(f-g)
Notification of performance test	63.1454(a) 63.1454(d), 63.7(b) 63.9(e)
Notification of compliance status	63.1454(e), 63.9(h)
<b>Reports</b>	
Performance test reports	63.10(d)

<b>Reports</b>	
Semiannual compliance reports	63.1455(a)(1), 63.10(e)
Startup, shutdown, and malfunction reports	63.1455(a)(2), 63.1455(d), 63.10(d) (5)

A source must keep the following records:

<b>Recordkeeping</b>	
Records of each notification and report	63.1456(a)(1), 63.10(b)(2)
Records of startup, shutdown, and malfunctions	63.1456(a)(2), 63.6(e)(3), 63.10(b) (2)
Records of performance tests, performance evaluations, and results	63.1456(a)(3-4), 63.10(b)(2)
Records of performance tests and other supporting documentation used to demonstrate compliance with an opacity limit under the rule	63.1456(a)(5), 63.1450(c), 63.10(b) (2)
Records of alarms for each bag leak detection system and description of corrective actions taken following each bag leak detection alarm	63.1453(c)(2), 63.1456(a)(6), 63.10(b)(2)
Records to support selection of site-specific operating limits for each control device that is not a baghouse or venture scrubber	63.1456(a)(7)
Maintain records for 5 years	63.1456(c), 63.10(b) (1)
Records of air pollution control equipment maintenance, malfunctions, and corrective actions	63.10(b)(2)(iii)
Records of control device operating parameter monitoring system performance, calibration, and maintenance	63.1450(b), 63.10(b) (2)
Records of monthly capture system visual inspection	63.1450(c), 63.10(b) (2)
Records of converter capture system operating parameter monitoring system performance, calibration, and maintenance	63.1450(c), 63.10(b) (2)
Records of control device or converter capture system operating parameter deviations	63.10(b)(2)
Copy of site-specific air pollution equipment startup, shutdown, and	63.1448(c), 63.6(e)

<b>Recordkeeping</b>	
malfunction plan	(3)
Copy of site-specific smelter fugitive dust control plan	63.1445(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**

<b>Respondent Activities</b>
Familiarization with the regulatory requirements.
Install, calibrate, maintain, and operate CMS for opacity, or for pressure drop and liquid supply pressure for control device.
Perform initial performance test, Reference Method 1, 2F, 2G, 3, 3A, 3B, 4, 5, 5D, 17, and 29 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:

<b>Agency Activities</b>
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**

A majority of the respondents are large entities (i.e., large businesses). However, the impact on small entities (i.e., small businesses) was taken into consideration during the development of the regulation. Due to technical considerations involving the process operations and the types of control equipment employed, the recordkeeping and reporting requirements are the same for both small and large entities. The Agency considers these to be the minimum requirements needed to ensure compliance and, therefore, cannot reduce them further for small entities. To the extent that larger businesses can use economies of scale to reduce their burden, the overall burden will be reduced.



### **5(d) Collection Schedule**

The specific frequency for each information collection activity within this request is shown below in Table 1: Annual Respondent Burden and Cost – NESHAP for Primary Copper Smelters (40 CFR Part 63, Subpart QQQ) (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 9,440 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 these subject standards are both labor costs which are addressed elsewhere in this ICR and the costs associated with continuous monitoring. The capital/startup costs are one-time costs when a facility becomes subject to the regulation. The annual operation and maintenance costs are the

ongoing costs to maintain the monitor(s) and other costs such as photocopying and postage.

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

<b>Capital/Startup vs. Operation and Maintenance (O&amp;M) Costs</b>						
(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)
Monitoring control device	\$2,800	0	\$0	\$1,540	3	\$4,620
Monitoring converter hood	\$10,800	0	\$0	\$1,200	3	\$3,600
<b>Total</b>			<b>\$0</b>			<b>\$8,220</b>

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 \$8,220. 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 \$8,220. These are the record-keeping costs.

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

The only costs to the Agency are those costs associated with analysis of the reported information. EPA's overall compliance and enforcement program includes 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 \$18,600.

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

Managerial	\$64.80 (GS-13, Step 5, \$40.50 + 60%)
Technical	\$48.08 (GS-12, Step 1, \$30.05 + 60%)
Clerical	\$26.02 (GS-6, Step 3, \$16.26 + 60%)

These rates are from the Office of Personnel Management (OPM), 2017 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees. Details upon which this estimate is

based appear below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Primary Copper Smelters (40 CFR Part 63, Subpart QQQ) (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 3 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 3 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 <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	3	0	0	3
2	0	3	0	0	3
3	0	3	0	0	3
Average	0	3	0	0	3

<sup>1</sup> 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 3.

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
Initial notification	0	1	0	0
Notification of performance test	3	5.5	0	16.5

<b>Total Annual Responses</b>				
Initial compliance determination	0	1	0	0
Performance test reports	3	5.5	0	16.5
Semiannual compliance reports	3	2	0	6
Startup, shutdown, malfunction reports	0	1	0	0
			Total	39

The number of Total Annual Responses is 39.

The total annual labor costs are \$991,000 (rounded). Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Primary Copper Smelters (40 CFR Part 63, Subpart QQQ) (Renewal).

### **6(e) Bottom Line Burden Hours and Cost Tables**

The detailed bottom line burden hours and cost calculations for the respondents and the Agency are shown in Tables 1 and 2 below, respectively, and summarized below.

#### **(i) Respondent Tally**

The total annual labor hours are 9,440 hours. Details regarding these estimates may be found below in Table 1. Annual Respondent Burden and Cost – NESHAP for Primary Copper Smelters (40 CFR Part 63, Subpart QQQ) (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 242 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are \$8,220. 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 397 labor hours at a cost of \$18,600; see below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Primary Copper Smelters (40 CFR Part 63, Subpart QQQ) (Renewal).

We assume that burdens for managerial tasks take 5% of the time required for technical tasks because the typical tasks for managers are to review and approve reports. Clerical burdens are assumed to take 10% of the time required for technical tasks because the typical duties of clerical staff are to proofread the reports, make copies and maintain records.

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

There is an adjustment increase in the total estimated burden and cost as currently identified in the OMB Inventory of Approved Burdens. This increase is not due to any program changes. The change in the respondent labor hour estimates occurred because of a change in assumption. This ICR assumes all existing respondents will have to familiarize with the regulatory requirements each year. There is also a decrease of 3 responses due to a correction in the number of sources that submit initial compliance determination reports.

#### **6(g) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 242 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-2014-0067. 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-2014-0067 and OMB Control Number 2060-0476 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 Primary Copper Smelters (40 CFR Part 63, Subpart QQQ) (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 <sup>a</sup>	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 (\$) <sup>b</sup>
1. Applications	N/A							
2. Survey and Studies	N/A							
3. Reporting requirements								
A. Familiarize with regulatory requirements <sup>c</sup>	16	1	16	3	48	2.4	4.8	\$5,799.86
B. Required activities								
Conduct PM performance test <sup>d</sup>	120	4.5	540	3	1,620	81	162	\$195,745.41
Conduct copper converter building performance test <sup>e</sup>	240	1	240	3	720	36	72	\$86,997.96
C. Create information	See 3B & 4E							
D. Gather existing information	See 3B & 4E							
E. Write Report								
Initial notification	8	1	8	0	0	0	0	\$0
Notification of performance test	2	5.5	11	3	33	1.65	3.3	\$3,987.41
Initial compliance determination	40	1	40	0	0	0	0	\$0
Performance test reports <sup>f</sup>	80	5.5	440	3	1,320	66	132	\$159,496.26
Semiannual compliance reports <sup>g</sup>	40	2	80	3	240	12	24	\$28,999.32
Startup, shutdown, malfunction report <sup>h</sup>	8	1	8	0	0	0	0	\$0
<b>Subtotal for Reporting Requirements</b>						<b>4,578</b>		<b>\$481,026</b>

4. Recordkeeping requirements								
A. Familiarize with regulatory requirements <sup>c</sup>	40	1	40	3	120	6	12	\$14,499.66
B. Plan activities	100	1	100	0	0	0	0	\$0
C. Implement Activities								
i. Prepare startup, shutdown, malfunction plan	80	1	80	0	0	0	0	\$0
ii. Copper concentrate dryer								
i Monitor control device parameters	0.5	365	182.5	3	547.5	27.38	54.75	\$66,154.70
iii. Smelting vessel								
i Inspect tapping hood system <sup>j</sup>	4	12	48	3	144	7.2	14.4	\$17,399.59
i Monitor control device parameters	0.5	365	182.5	3	547.5	27.38	54.75	\$66,154.70
iv. Slag cleaning vessel								
i,k Inspect tapping hood system <sup>j,k</sup>	4	12	48	1	48	2.4	4.8	\$5,799.86
i,k Monitor control device parameters	0.5	365	182.5	1	182.5	9.13	18.25	\$22,051.57
v. Batch copper converters								
i Inspect converter hood system <sup>j</sup>	4	12	48	3	144	7.2	14.4	\$17,399.59
i Monitor hood system ventilation parameters <sup>i</sup>	0.5	365	182.5	3	547.5	27.38	54.75	\$66,154.70
i Monitor control device parameters	0.5	365	182.5	3	547.5	27.38	54.75	\$66,154.70
vi. Prepare fugitive dust control plan	100	1	100	0	0	0	0	\$0
D. Develop record system	100	1	100	0	0	0	0	\$0
E. Time to enter information <sup>l</sup>	1	365	365	3	1,095	54.75	109.5	\$132,309.40
F. Time to train personnel <sup>m</sup>	100	1	100	3	300	15	30	\$36,249.15
<b>Subtotal for Recordkeeping Requirements</b>						<b>4,857</b>		<b>\$510,328</b>
<b>TOTAL LABOR BURDEN AND COST (rounded) <sup>n</sup></b>						<b>9,440</b>		<b>\$991,000</b>



<b>CAPITAL AND O&amp;M COST (rounded) <sup>n</sup></b>									<b>\$8,220</b>
<b>GRAND TOTAL (rounded) <sup>n</sup></b>									<b>\$999,000</b>

**Assumptions:**

<sup>a</sup> We have assumed that there are approximately three sources that are subject to the standard, with no new additional sources expected over the next three years.

<sup>b</sup> 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 percent to account for the benefit packages available to those employed by private industry.

<sup>c</sup> We have assume that all respondents will have to familiarize with the regulatory requirements each year.

<sup>d</sup> We have assumed that each of the three respondents will take 120 hours, 4.5 times per year to conduct performance tests for PM as required under 40 CFR 63.1453.

<sup>e</sup> We have assumed that each of the three respondents will take 240 hours to conduct copper converter building performance test once per year.

<sup>f</sup> We have assumed that each respondents will take eighty hours, 5.5 times per year to complete a performance test report.

<sup>g</sup> We have assumed that it will take each respondent forty hours to write the semiannual compliance reports.

<sup>h</sup> We have assumed no respondents will have a startup, shutdown, or malfunction that is not consistent with the SSM plan.

<sup>i</sup> Recordkeeping requirements are required daily on all monitor control device parameters.

<sup>j</sup> We have assumed that inspections on all hood systems are done on a monthly basis.

<sup>k</sup> We have assumed that one of the three existing sources will be equipped with a slag cleaning vessel.

<sup>l</sup> Each respondent is required to record information on a daily basis.

<sup>m</sup> We have assumed that it will take each of the respondent 100 hours to train personnel once a year.

<sup>n</sup> Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

**Table 2: Average Annual EPA Burden and Cost – NESHAP for Primary Copper Smelters (40 CFR Part 63, Subpart QQQ) (Renewal)**

Activity	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H) Cost, (\$) <sup>b</sup>
	EPA person-hours per occurrence <sup>e</sup>	No. of occurrences per plant per year	EPA person-hours per plant per year (C=AxB)	Plants per year <sup>a</sup>	Technical person-hours per year (E=CxD)	Management person-hours per year (F=Ex0.05)	Clerical person-hours per year (G=Ex0.1)	
Activity	N/A							
Review reports								
a. Initial notifications	2	1	2	0	0	0	0	\$0
b. Notification of performance test <sup>c</sup>	2	5.5	11	3	33	1.65	3.3	\$1,779.43
c. Initial compliance determination	8	1	8	0	0	0	0	\$0
d. Performance test reports <sup>d</sup>	16	5.5	88	3	264	13.2	26.4	\$14,235.41
e. Semiannual compliance reports <sup>e</sup>	8	2	16	3	48	2.4	4.8	\$2,588.26
f. Report of SSM <sup>f</sup>	8	1	8	0	0	0	0	\$0
<b>TOTAL ANNUAL BURDEN AND COST (rounded) <sup>g</sup></b>						<b>397</b>		<b>\$18,600</b>

**Assumptions:**

<sup>a</sup> We have assumed that there are approximately three sources that are subject to the standard, with no new additional sources expected over the next three years.

<sup>b</sup> This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for government overhead expenses: \$64.80 Managerial rate (GS-13, Step 5, \$40.50 x 1.6), \$48.08 Technical rate (GS-12, Step 1, \$30.05 x 1.6), and \$26.02 Clerical rate (GS-6, Step 3, \$16.26 x 1.6). These rates are from the Office of Personnel Management (OPM) 2017 General Schedule which excludes locality rates of pay.

<sup>c</sup> We have assumed that EPA will take two hours to review each notification of performance test.

<sup>d</sup> We have assumed that EPA will take 16 hours to review each performance test report.

<sup>e</sup> We have assumed that EPA will take eight hours to review each semiannual compliance report.

<sup>f</sup> We have assumed no respondents will have a startup, shutdown, or malfunction that is not consistent with the SSM plan.

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