

**Table 1: Annual Respondent Burden and Cost – NESHAP for Primary Copper Smelters (40 CFR**

Burden item	(A)	(B)	(C)	(D)
	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>
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
B. Required activities				
Conduct PM performance test <sup>d</sup>	120	4.5	540	3
Conduct copper converter building performance test <sup>e</sup>	240	1	240	3
C. Create information	See 3B & 4E			
D. Gather existing information	See 3B & 4E			
E. Write Report				
Initial notification	8	1	8	0
Notification of performance test	2	5.5	11	3
Initial compliance determination	40	1	40	0
Performance test reports <sup>f</sup>	80	5.5	440	3
Semiannual compliance reports <sup>g</sup>	40	2	80	3
Startup, shutdown, malfunction report <sup>h</sup>	8	1	8	0
<b>Subtotal for Reporting Requirements</b>				
4. Recordkeeping requirements				
A. Familiarize with regulatory requirements <sup>c</sup>	40	1	40	3
B. Plan activities	100	1	100	0
C. Implement Activities				
i. Prepare startup, shutdown, malfunction plan	80	1	80	0
ii. Copper concentrate dryer				
Monitor control device parameters <sup>i</sup>	0.5	365	182.5	3
iii. Smelting vessel				
Inspect tapping hood system <sup>j</sup>	4	12	48	3
Monitor control device parameters <sup>i</sup>	0.5	365	182.5	3
iv. Slag cleaning vessel				
Inspect tapping hood system <sup>j, k</sup>	4	12	48	1
Monitor control device parameters <sup>i, k</sup>	0.5	365	182.5	1
v. Batch copper converters				
Inspect converter hood system <sup>j</sup>	4	12	48	3
Monitor hood system ventilation parameters <sup>i</sup>	0.5	365	182.5	3
Monitor control device parameters <sup>i</sup>	0.5	365	182.5	3
vi. Prepare fugitive dust control plan	100	1	100	0
D. Develop record system	100	1	100	0

E. Time to enter information <sup>l</sup>	1	365	365	3
F. Time to train personnel <sup>m</sup>	100	1	100	3
<b>Subtotal for Recordkeeping Requirements</b>				
<b>TOTAL LABOR BURDEN AND COST (rounded) <sup>n</sup></b>				
<b>CAPITAL AND O&amp;M COST (rounded) <sup>n</sup></b>				
<b>GRAND TOTAL (rounded) <sup>n</sup></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.
- <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 other labor.
- <sup>c</sup> We have assumed 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 hood systems.
- <sup>e</sup> We have assumed that each of the three respondents will take 240 hours to conduct copper converter building performance tests.
- <sup>f</sup> We have assumed that each respondent 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.

Part 63, Subpart QQQ) (Renewal)

108.28      144.33      53.34

(E)	(F)	(G)	(H)
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>
48	2.4	4.8	\$5,799.86
1,620	81	162	\$195,745.41
720	36	72	\$86,997.96
0	0	0	\$0
33	1.65	3.3	\$3,987.41
0	0	0	\$0
1,320	66	132	\$159,496.26
240	12	24	\$28,999.32
0	0	0	\$0
<b>4,578</b>			<b>\$481,026</b>
120	6	12	\$14,499.66
0	0	0	\$0
0	0	0	\$0
547.5	27.38	54.75	\$66,154.70
144	7.2	14.4	\$17,399.59
547.5	27.38	54.75	\$66,154.70
48	2.4	4.8	\$5,799.86
182.5	9.13	18.25	\$22,051.57
144	7.2	14.4	\$17,399.59
547.5	27.38	54.75	\$66,154.70
547.5	27.38	54.75	\$66,154.70
0	0	0	\$0
0	0	0	\$0

1,095	54.75	109.5	\$132,309.40
300	15	30	\$36,249.15
<b>4,857</b>			<b>\$510,328</b>
<b>9,440</b>			<b>\$991,000</b>
			<b>\$8,220</b>
			<b>\$999,000</b>

responses hr/response  
39 242.05128

es expected over the next three years.

per hour for Technical labor, and \$53.34 per hour for Clerical labor. These rates are from the United States Department of ]

or PM as required under 40 CFR 63.1453.

test once per year.

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 ava

ilable to those employed by private industry.

**Table 2: Average Annual EPA Burden and Cost – NESHAP for Primary Copper Smelters (40 C]**

48.08

Activity	(A)	(B)	(C)	(D)	(E)
	EPA person-hours per occurrence	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)
Activity	N/A				
Review reports					
a. Initial notifications	2	1	2	0	0
b. Notification of performance test <sup>c</sup>	2	5.5	11	3	33
c. Initial compliance determination	8	1	8	0	0
d. Performance test reports <sup>d</sup>	16	5.5	88	3	264
e. Semiannual compliance reports <sup>e</sup>	8	2	16	3	48
f. Report of SSM <sup>f</sup>	8	1	8	0	0
<b>TOTAL ANNUAL BURDEN AND COST (rounded) <sup>g</sup></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.
- <sup>b</sup> This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for government contributions.
- <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.



**FR Part 63, Subpart QQQ) (Renewal)**

64.8      26.02

(F)	(G)	(H)
<b>Management person-hours per year (F=Ex0.05)</b>	<b>Clerical person-hours per year (G=Ex0.1)</b>	<b>Cost, (\$) <sup>b</sup></b>
0	0	\$0
1.65	3.3	\$1,779.43
0	0	\$0
13.2	26.4	\$14,235.41
2.4	4.8	\$2,588.26
0	0	\$0
<b>397</b>		<b>\$18,600</b>

ces expected over the next three years.

ment overhead expenses: \$64.80 Managerial rate (GS-13, Step 5, \$40.50 x 1.6), \$48.08 Technical rate (GS-12, Step 1, \$30.0

15 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

at (OPM) 2017 General Schedule which excludes locality rates of pay.