

**Table 1: Annual Respondent Burden and Cost – NESHAP for Primary Copper Smelting (40 C)**

Burden item	(A)	(B)	(C)
	Person hours per occurrence	No. of occurrences per respondent per year	Person hours per respondent per year (C=AxB)
1. Applications	N/A		
2. Survey and Studies	N/A		
3. Reporting Requirements			
A. Familiarization with rule requirements			
i. Current requirements <sup>d</sup>	16	1	16
ii. Proposed requirements	2	2	4
B. Required activities			
i. Conduct PM performance test <sup>e</sup> (current)	120	4.5	540
ii. Conduct copper converter building performance test <sup>f</sup> (current)	240	1	240
iii. PM performance test, anode refining point source proposed <sup>g</sup>	-	1	-
iv. PM performance test, roof vents for converter operations, smelting furnaces, anode refining (new) <sup>h</sup>	-	3	-
v. Whole facility mercury test <sup>i</sup>	-	1	-
C. Create information	N/A		
D. Gather existing information	N/A		
E. Write report			
i. Initial Notifications <sup>j</sup>	2	1	2
ii. Notification of performance test (current + proposed) <sup>k</sup>	2	5.5	11
iii. Initial compliance determination (current + proposed) <sup>l</sup>	40	1	40
iv. Report of performance test (through CEDRI using ERT) <sup>l</sup>	8	1	8
v. Semiannual compliance reports	40	2	80
<b>Subtotal for Reporting Requirements</b>			
4. Recordkeeping Requirements			
A. Familiarization with rule requirements (current) <sup>d</sup>	40	1	40
B. Plan activities <sup>j</sup>	3	1	3
C. Implement Activities	16	1	16
i. Copper concentrate dryer			
Monitor control device parameters <sup>m</sup> (current)	0.5	365	182.5
ii. Smelting vessel			
Inspect tapping hood system <sup>n</sup> (current)	4	12	48
Monitor control device parameters <sup>m</sup> (current)	0.5	365	182.5
iii. Slag cleaning vessel			
Inspect tapping hood system <sup>n,o</sup>	4	12	48
Monitor control device parameters <sup>m,o</sup>	0.5	365	182.5
iv. Batch copper converters			

Inspect converter hood system <sup>n</sup>	4	12	48
Monitor hood system ventilation parameters <sup>m</sup>	0.5	365	182.5
Monitor control device parameters <sup>m</sup>	0.5	365	182.5
v. Prepare fugitive dust control plan	100	1	100
vi. Monitor roof vents - CPMS on converter operations, smelting furnaces, anode refining <sup>p</sup>			
Daily for first 30 days	0.5	30	15
Weekly for remaining 48 weeks	0.5	48	24
vii. Monitoring processes and control devices for mercury compliance <sup>q</sup>	1	12	12
D. Develop record system <sup>j</sup> (current)	100	1	100
E. Time to enter information <sup>r</sup> (current)	1	365	365
F. Time to train personnel <sup>s</sup> (current)	100	1	100
<b>Subtotal for Recordkeeping Requirements</b>			
<b>TOTAL LABOR BURDEN AND COST (unrounded)</b>			
<b>TOTAL LABOR BURDEN AND COST (rounded) <sup>t</sup></b>			

**Assumptions:**

<sup>a</sup> There are 2 existing sources currently subject to this rule. We estimate there will be no additional new source that will be

<sup>b</sup> This ICR uses the following labor rates: \$146.43 per hour for Executive, Administrative, and Managerial labor; \$119.71 rates are from the United States Department of Labor, Bureau of Labor Statistics, December 2018, “Table 2. Civilian Work “Total Compensation.” The rates have been increased by 110% to account for the benefit packages available to those employees. The burden associated with the existing NESHAP for primary copper smelting is from the Information Collection Request for Primary Copper Smelters (Renewal). A Notice by the Environmental Protection Agency on 10/11/2018 (<https://www.fr.gov/request-submitted-to-omb-for-review-and-approval-comment-request-neshap-for>). In some cases, it was necessary to modify the time of the renewal burden estimate there were 3 facilities affected by the rule. At the time of this rulemaking, there are revised to reflect the changes in the number of affected facilities.

<sup>d</sup> We have assumed that all respondents will have to familiarize themselves with the regulatory requirements each year.

<sup>e</sup> We have assumed that each of the two respondents will take 120 hours, 4.5 times per year to conduct performance tests

<sup>f</sup> We have assumed that each of the three respondents will take 240 hours to conduct copper converter building performance

<sup>g</sup> PM testing - Contractor cost based on the following: Testing anode refining point source at Asarco only. Includes initial for a total of 2 tests during 3-yr period. Annual average cost = (1 test/yr x 2yr x \$27000/test)/3 = \$18,000/yr.

<sup>h</sup> PM testing - Contractor cost based on the following: 3 tests, 1 test each on the roof vents for the converter operations, smelting performance tests 2 years after promulgation of rule for a total of one test during the 3-year period. Testing costs is estimated average cost = \$95,000/3 = 31,667.

<sup>i</sup> Mercury testing - Contractor cost based on the following: 3 Method 29 tests to be conducted on smelting furnaces, converter tests are required 1 year after rule is promulgation and annually thereafter for a total of 2 tests per facility over the 3 year period = (\$44,100/test/facility/yr x 2 facilities x 2 test over the 3-yr ICR period)/3 = \$58,800/yr.

<sup>j</sup> These requirements are one-time requirements that apply to new respondents. There are no new respondents estimated or

<sup>k</sup> It is assumed that the number of notices given for the performance tests under the existing rule will include notices given

<sup>l</sup> Submittal of performance test data through the EPA's CEDRI in ERT format is estimated to require 8 hours annually, in order to minimize emissions. Electronic reporting replaces the manual reporting of performance testing.

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

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

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

<sup>p</sup> We assumed each roof vent would be monitored daily for visible emissions using Method 22. After monitoring for 30 days per week. The person hours per occurrence includes time to take the reading and to record the information.

<sup>q</sup> We assumed that each facility would monitor the operating parameters established during their performance test for mercury. This would consist of checking the parameters once per month at each facility. It is estimated that 1 hour per month would be required

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

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

†Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.



2	96	5	10	\$12,764
2	365	18	37	\$48,530
2	365	18.25	36.5	\$48,530
0	0	0	0	\$0
2	30	1.5	3	\$3,989
2	48	2.4	4.8	\$6,382
2	24	1.2	2.4	\$3,191
0	0	0	0	\$0
2	730	36.5	73	\$97,060
2	200	10	20	\$26,592
		<b>3,444</b>		<b>\$398,147</b>
				<b>\$745,675</b>
		<b>5,500</b>		<b>\$750,000</b>

<b>Hours per response</b>
<b>324</b>

ecome subject to the rule over the 3-year period of this ICR.

per hour for Technical labor, and \$59.285 per hour for Clerical labor. These  
 rkers, by Occupational and Industry group.” The rates are from column 1,  
 oloyed by private industry.  
 est Submitted to OMB for Review and Aproval; Comment Request; NESHAP  
 ederalregister.gov/documents/2018/10/11/2018-22069/information-collection-  
 lify the existing burden estimates due to changes in the affected respondents. At  
 e only 2 operating facilities. Therefore, the existing burden estimates were

for PM as required under 40 CFR 63.1453.

ice test once per year.

performance test 1 year after promulgation of rule and test annually thereafter

melting furnaces, and anode refining at Asarco. Includes the 3 initial  
 ited to be \$95,000 and includes associated recordkeeping and reporting. Annual

erters, and anode refining at both of the 2 copper smelting facilities. The initial  
 ethod of this ICR. At a cost of \$44,100 per facility per year, total cost for the 3-

ver the 3-year period of this ICR.

n for the new testing required.

cludes keeping records of failures to meet the standards and the actions taken to

ays with no visible emissions, the facility can reduce monitoring to once per

ery from the smelting furnaces, converters, and anode refining. Monitoring  
 equired at each facility.



<b>Proposal</b>	
<b>New</b>	<b>Continured Compliance</b>
	\$0
	\$0
	\$0
	\$0
	\$4,255
\$1,064	
	\$0
	\$143,596
	\$63,821
\$18,000	
\$31,667	
\$58,800	
	\$2,925
\$2,127	
	\$21,274
	\$10,637
	\$48,530
	\$12,764
	\$48,530
	\$6,382
	\$24,265

	\$12,764
	\$48,530
	\$48,530
	\$0
	\$0
\$3,989	
\$6,382	
\$3,191	
	\$97,060
	\$26,592
<b>125,220</b>	<b>620,456</b>
<b>\$130,000</b>	<b>\$620,000</b>

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

49.44

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	2	22
c. Performance test reports <sup>d</sup>	16	7.5	120	2	240
d. Performance test reports (Asarco only) <sup>e</sup>	16	1.7	27.2	1	27.2
e. Semiannual compliance reports <sup>f</sup>	8	2	16	2	32
f. Initial compliance determination <sup>h</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 two sources that are subject to the standard, with no new additional sources expected over

<sup>b</sup> This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for gover rate of \$66.62 (GS-13, Step 5, \$41.07 + 60%), Technical rate of \$49.44 (GS-12, Step 1, \$30.47 + 60%), and Clerical rate of These rates are from the Office of Personnel Management (OPM) “Salary Table 2019-GS” which excludes locality rates of

<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. Number of occurrences/yr (i.e., nu = 5.5 (current inventory) + 2 (Mercury tests for smelter, converter, and anode refining at each facility. 3 tests/facility/yr for test/yr/facility x 2 yr = 6 test/3 yr/ICR period/facility = 2 test/yr/facility) = 7.5 tests/yr/facility

<sup>e</sup> We have assumed that EPA will take 16 hours to review each performance test report. Number of occurrences/yr (i.e., nu = 0.67 (test for anode refining point source at Asarco only: 2 tests/3 yr period = 0.67 test/yr) + 1 (test roof vents from smelt only 2 yrs after promulgation for 1 series of test for the 3 yr period: 3 tests/3-yr period = 1 test/yr) = 1.67 test/yr/facility

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

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

<sup>h</sup> These requirements are one-time requirements that apply to new respondents. There are no new respondents estimated over

**FR Part 63, Subpart QQQ) (Proposed Amendments)**

66.62      26.75

(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
1.1	2.2	\$1,219.81
12	24	\$13,307.04
1.36	2.72	\$1,508.13
1.6	3.2	\$1,774.27
0	0	\$0
<b>369</b>		<b>\$17,800</b>

r the next three years.

ment overhead expenses: Managerial  
 : \$26.75 (GS-6, Step 3, \$16.49 + 60%).  
 pay.

mber of test reports to review each year)  
 2 of the 3-yr ICR period = 3

mber of test reports to review each year)  
 ing, converter, anode refining at Asarco

er the 3-year period of this ICR.