

### ICR Summary Information

Hours per Response	117
Number of Respondents	9
Total Estimated Burden Hours	2,440
Total Estimated Costs	\$368,000
Annualized Capital O&M	\$75,400
Total Annual Responses	20.8
Form Number	Not Applicable

**Table 1: Annual Respondent Burden and Cost – NESHAP for Mineral Wool Production (40 CFR**

123.94

Burden Items	(A) Person hours per occurrence	(B) Occurrences per respondent per year	(C) Person hours per respondent per year (AxB)	(D) Respondents per year <sup>a</sup>	(E) Technical person hours per year (Cx D)
1. Applications	N/A				
2. Survey and Studies	N/A				
3. Reporting Requirements <sup>c</sup>					
A. Familiarization with the regulatory requirements	4	1	4	9	36
B. Required Activities					
Initial performance test <sup>d</sup>	490	1	490	0	0
Repeat performance test <sup>d,e</sup>	490	0.2	98	0	0
Operations, maintenance, and monitoring plan <sup>f</sup>	40	1	40	0	0
C. Create Information	See 3B				
D. Gather Existing Information	See 3B				
E. Write Reports					
Notification of applicability <sup>g</sup>	2	1	2	0	0
Notification of construction/ reconstruction <sup>g</sup>	2	1	2	0	0
Notification of actual startup <sup>g</sup>	2	1	2	0	0
Notification of special compliance requirements <sup>g</sup>	2	1	2	0	0
Notification of initial performance test <sup>g</sup>	2	1	2	0	0
Notification of compliance status <sup>g</sup>	2	1	2	0	0
Request for extension of compliance adjustment to time periods, and changes in information <sup>g</sup>	2	1	2	0	0
Report of performance test	See 3B				
Excess emissions report <sup>h</sup>	16	2	32	1.8	57.6
Report of no excess emission <sup>i</sup>	8	2	16	7.2	115.2
Quality improvement plan <sup>j</sup>	40	1	40	1	40
<b>Subtotal for Reporting</b>					
4. Recordkeeping Requirements					
A. Familiarization with the regulatory requirements	See 3A				
B. Plan Activities	See 3E				
C. Implement Activities	See 3E				
D. Develop Record System	See 3E				
E. Time to Enter Information					
Records of operating parameters and emissions <sup>k</sup>	4	52	208	9	1872
F. Time to transmit or disclose information <sup>l</sup>	0.25	2	0.5	9	4.5
G. Time to Train Personnel	N/A				
H. Time for Audits	N/A				
<b>Subtotal for Recordkeeping</b>					
<b>Total Labor Burden and Cost (rounded)<sup>m</sup></b>					
<b>Capital and O&amp;M Cost (see Section 6(b)(iii)):<sup>m</sup></b>					
<b>TOTAL COST:<sup>m</sup></b>					

**Assumptions:**

- <sup>a</sup> We have assumed that the average number of respondents potentially subject to this rule is 9. There will be no additional of this ICR.
- <sup>b</sup> This ICR uses the following labor rates: \$147.40 for Managerial, \$117.92 for Technical, and \$57.02 for Clerical. These rates are from the Department of Labor, Bureau of Labor Statistics, June 2018, "Table 2: Civilian Workers, by Occupational and Industry Group Compensation." The rates have been increased by 110 percent to account for the benefit packages available to those employees.
- <sup>c</sup> We have assumed that it will take each respondent 4 hours to familiarize with the regulatory requirements.
- <sup>d</sup> We have assumed that it will take 490 hours for each new respondent to complete an initial performance test based on the following: 2.23 sources per plant; 2.23 sources per plant x 130 hours per source +200 hours for calibration, retesting, and other tasks.
- <sup>e</sup> We have assumed that 20% of respondents will have to repeat performance test due to failure.
- <sup>f</sup> We have assumed that each of the respondents will take 40 hours to prepare the operation, maintenance, and monitoring plans.
- <sup>g</sup> We have assumed that each of the respondents will take 2 hours to write reports.
- <sup>h</sup> We have assumed that 20% of respondents will each take 16 hours two times per year to write excess emission reports.
- <sup>i</sup> We have assumed that 80% of respondents will take 8 hours two times per year to complete the report for no excess emissions.
- <sup>j</sup> We have assumed that 10% of facilities are required to prepare a quality improvement plan each year.
- <sup>k</sup> We have assumed that each respondent will take 4 hours 52 times per year to enter information.
- <sup>l</sup> We have assumed that it will take each respondent 15 minutes (0.25 hours) two times per year to transmit or disclose information.
- <sup>m</sup> Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

**Part 63, Subpart DDD) (Renewal)**

157.61      62.52

(F) Managerial person hours per year (Ex0.05)	(G) Clerical person hours per year (Ex0.1)	(H) Total Cost per year, \$ <sup>b</sup>
1.8	3.6	\$4,970.61
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
2.88	5.76	\$7,952.98
5.76	11.52	\$15,905.95
2	4	\$5,523
<b>286</b>		<b>\$34,352.44</b>
93.6	187.2	\$258,471.72
0.225	0.45	\$621.33
<b>2,158</b>		<b>\$259,093.05</b>
<b>2,440</b>		<b>\$293,000</b>
		<b>\$75,400</b>
		<b>\$368,000</b>

117 hr per resp

new sources over the three-year period

es are from the United States  
ip.” The rates are from column 1, “Total  
ed by private industry.

ollowing: (1.56 cupolas plus 0.67  
mple analysis, etc) for a total of 490

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**Table 2: Average Annual EPA Burden and Cost – NESHAP for Mineral Wool Production (40**

52.37

Activity	(A) EPA Hours per occurrence	(B) Number of occurrences per Year	(C) EPA Hours per Year (AxB)	(D) Plants per Year <sup>a</sup>	(E) Technical Hours per Year (Cx D)
Initial performance tests					
New or modified facility	40	1	40	0	0
Repeat performance tests					
A. Familiarization with the regulatory requirements <sup>c</sup>	40	0.2	8	0	0
Report review					
Notification of applicability	2	1		0	
Notification of construction/ reconstruction	2	1	2	0	0
Notification of actual startup	2	1	2	0	0
Notification of special compliance requirements	1	1	1	0	0
Notification of initial performance test	2	1	2	0	0
Notification of compliance status	2	1	2	0	0
Request for extension of compliance, adjustment to time p	2	1	2	0	0
Quality improvement plan <sup>d</sup>	40	1	40	1	40
Operations, maintenance, and monitoring plan	40	1	40	0	0
Report of performance test	40	1	40	0	0
Excess emissions report <sup>e</sup>	20	2	40	1.8	72
Report of no excess emissions <sup>f</sup>	2	2	4	7.2	28.8
Review compliance test reports for COS for cupolas and formaldehyde, phenol, and methanol for collection/curing operations <sup>g</sup>	8	1	8	9	72
<b>Total Labor Burden and Cost (rounded) <sup>h</sup></b>					

Assumptions:

<sup>a</sup> We have assumed that the average number of respondents potentially subject to this rule is 9. There will be no addit period of this ICR.

<sup>b</sup> This ICR uses the following labor rates: \$70.56 (GS-13, Step 5, \$44.10 + 60%) for Managerial, \$52.37 (GS-12, Step \$28.34 (GS-6, Step 3, \$17.71 + 60%) for Clerical. These rates are from the Office of Personnel Management (OPM), 2 locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to gover

<sup>c</sup> We have assumed that 20% of respondents will fail the performance test.

<sup>d</sup> We have assumed that it will take 40 hours to review the quality improvement plan report.

<sup>e</sup> We have assumed that 20% of respondents will submit the excess emissions report and it will take 20 hours to review

<sup>f</sup> We have assumed that 80% of respondents will submit the report of no excess emissions and it will take take 2 hours

<sup>g</sup> Assumes Agency will review all of the annual reports - including the new COS, phenol, and methanol emissions testi

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

**0 CFR Part 63, Subpart DDD) (Renewal)**

70.56 28.34

(F) Managerial Hours per Year (Ex0.05)	(G) Clerical Hours per Year (Ex0.10)	(H) Total cost per year, \$ <sup>b</sup>
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
2	4	\$2,349
0	0	\$0
0	0	\$0
3.6	7.2	\$4,228.70
1.44	2.88	\$1,691.48
3.6	7.2	\$4,228.70
<b>245</b>		<b>\$12,500</b>

ional new sources over the three-year

1, \$32.73 + 60%) for Technical, and  
022 General Schedule, which excludes  
nment employees.

v.

s to review.

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<b>Capital/Startup vs. Operation and Maintenance (O&amp;M) Costs</b>						
(A)	(B)	(C)	(D)	(E)	(F)	(G)
Continuous Monitoring Device	Capital/Startup Cost for One Respondent	Number of New Respondents	Total Capital/Startup Cost, (B X C)	Annual O&M Costs for One Respondent	Number of Respondents with O&M	Total O&M, (E X F)
Baghouse Leak Detection <sup>a, b</sup>	\$27,738	0	\$0	\$931	9	\$8,377
COS Testing <sup>b, c</sup>	\$0	0	\$0	\$4,207	9	\$37,867
HCl/HF Testing <sup>b, c</sup>	\$0	0	\$0	\$1,267	9	\$11,401
Phenol, methanol, formaldehyde testing <sup>b, c</sup>	\$0	0	\$0	\$1,968	9	\$17,712
Total <sup>d</sup>			\$0			\$75,400

<sup>a</sup> Capital/Startup and O&M costs for baghouse leak detection are estimated as follows: \$14,900 capital/startup cost per cupola x 1.56 cupolas per facility; and \$500 O&M per cupola x 1.56 cupolas per facility. These costs were adjusted from 2006 \$ to 2020 \$ using the CEPCI Index.

<sup>b</sup> We have assumed there are an average of 1.56 cupolas and 0.67 bonded lines per respondent.

<sup>c</sup> Test costs are based on the estimates from EPA-HQ-OAR-2010-1041-0171 adjusted from 2011 to 2020 \$ using the CEPCI Index. We have assumed that the previously estimated cost to test for phenol/methanol after adjustment to the 2020 \$ year is representative of the cost to test for phenol/methanol/formaldehyde. Based on EPA's experience with the NESHAP program and recent cost estimates for similar source categories, we assume that these estimates are reasonable for testing for all three of these pollutants.

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



<b>Total Annual Responses</b>			
(A)	(B)	(C)	(D)
Information Collection Activity	Number of Respondents	Number of Responses	Number of Existing Respondents That Keep Records But Do Not Submit Reports
Notification of applicability	0	1	0
Notification of construction/reconstruction	0	1	0
Notification of actual startup	0	1	0
Notification of special compliance requirements	0	1	0
Notification of initial performance test	0	1	0
Notification of compliance status	0	1	0
Excess emissions report	1.8	2	0
Report of no excess emissions	7.2	2	0
Performance test results for COS, HCl/HG, formaldehyde, phenol, and methanol <sup>1</sup>	9	0.2	0
Quality improvement plan	1	1	0
			Total

<sup>1</sup> Performance tests must be completed once every five years (1 report of performance test results/5 years = respondent).

(E)
Total Annual Responses
$E=(B \times C)+D$
0
0
0
0
0
0
0
3.6
14.4
1.8
1
20.8

0.2 reports per year per

**Number of Respondents**

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	9	0	0	9
2	0	9	0	0	9
3	0	9	0	0	9
Average	0	9	0	0	9

## 1. Original Costs from EPA-HQ-OAR-2010-1041-0171

Facility	Location	Cupolas <sup>a</sup>		
		# Cupolas	Annualized (New) COS Testing Cost <sup>b</sup>	Annualized (New) HCl/HF Testing Cost <sup>b</sup>
Industrial Insulation Group (IIG)	Phenix City, AL	1	2,800	800
Thermafiber	Wabash IN	2	5,200	1,600
USG Interiors	Red Wing, MN	2	5,200	1,600
USG Interiors	Walworth, WI	1	2,800	800
Amerrock Products	Nolanville, TX	2	5,200	1,600
Isolatek Int'l	Huntington, IN	2	5,200	1,600
Rock Wool Mfg	Leeds, AL	1	2,800	800
Roxul USA	Byhalia, MS	2	5,200	1,600
SubTotal		13	\$34,400	\$10,400

a – 8 of the 13 cupolas currently have (or will have) incineration/afterburner controls. None of the facilities are expected to have these controls in the next year.

b – Cupola testing costs reflect incremental (new) costs for COS, HF, and HCl testing; current test requirements for P and HF testing are expected to be implemented in the next year.

c – Collection/curing costs reflect incremental costs for phenol and methanol testing; current test requirements for for these tests are expected to be implemented in the next year.

## 2. Updates for ICR Renewal 1799.11

Facility <sup>a</sup>	Location	# Cupolas <sup>b</sup>	Annualized COS Testing Cost <sup>c</sup>	Annualized HCl/HF Testing Cost <sup>c</sup>
Johns Manville (IIG)	Phenix City, AL	1	\$2,850	\$814
Thermafiber (Owens Corning)	Wabash IN	2	\$5,293	\$1,629
USG Interiors	Red Wing, MN	2	\$5,293	\$1,629
USG Interiors	Walworth, WI	1	\$2,850	\$814
American Rockwool	Nolanville, TX	2	\$5,293	\$1,629
Isolatek	Huntington, IN	2	\$5,293	\$1,629
Roxul USA	Byhalia, MS	2	\$5,293	\$1,629
Rockwool (formerly Roxul)	Kearneysville, WV	1	\$2,850	\$814
Thermafiber (Owens Corning)	Joplin, MO	1	\$2,850	\$814
<b>Total</b>		<b>14</b>	<b>\$37,867</b>	<b>\$11,401</b>
<b>Annual Average for One Respondent</b>		<b>1.56</b>	<b>\$4,207</b>	<b>\$1,267</b>

<sup>a</sup> The revised facility list was provided by the North American Insulation Manufacturers Association (NAIMA). The facility list is expected to come back online within the next year; therefore, it is included in the average number of respondents per ICR. We have assumed that repairs made at the facility do not meet the definition of a reconstructed source.

<sup>b</sup> We have assumed that the number of cupolas and bonded lines have not changed for existing facilities. We have assumed that each RTR has 1 cupola and 1 bonded line.

<sup>c</sup> Costs per test are based on the estimates from EPA-HQ-OAR-2010-1041-0171 adjusted from 2011 to 2020 \$ using 1. The estimated cost to test for phenol/methanol after adjustment to the 2020 \$ year is representative of the cost to test for p with the NESHAP program and recent cost estimates for similar source categories, we assume that these estimates are

<b>Combined Collection/Curing</b>		
<b># Bonded Lines</b>	<b>Annualized (New) Testing Cost<sup>c</sup></b>	<b>Total Facility Incremental Annualized (New) Costs</b>
1	3,000	\$6,600
1	3,000	\$9,800
0	0	\$6,800
0	0	\$3,600
0	0	\$6,800
0	0	\$6,800
1	3,000	\$6,600
2	5,400	\$12,200
5	\$14,400	<b>\$59,200</b>

ted to have any additional equipment or material cost impacts to meet the proposed emission limits.

'M not included.

maldehyde not included.

<b># Bonded Lines<sup>b</sup></b>	<b>Annualized Methanol/Phenol/Formaldehyde Testing Cost<sup>c</sup></b>	<b>Total Facility Annualized Costs</b>
1	3,054	\$6,718
1	3,054	\$9,976
0	0	\$6,922
0	0	\$3,665
0	0	\$6,922
0	0	\$6,922
2	5,497	\$12,419
1	3,054	\$6,718
1	3,054	\$6,718
<b>6</b>	<b>\$17,712</b>	<b>\$66,980</b>
<b>0.67</b>	<b>\$1,968</b>	<b>\$7,442</b>

American Rockwool facility in TX is not operating but is year (9 respondents) for the three-year period covered by this

umed that the two facilities added to the list since the 2015

the CEPCI Index. We have assumed that the previously  
phenol/methanol/formaldehyde. Based on EPA's experience  
e reasonable for testing for all three of these pollutants.