

**Table 1: Annual Respondent Burden and Cost – NESHAP for Asphalt Processing and Asphalt Roof**

Burden Item	(A)	(B)	(C)
	Person-Hours per occurrence	Number of occurrences per year	Person-Hours per respondent per year (C=A*B)
1. Applications	N/A		
2. Survey and Studies	N/A		
3. Acquisition, Installation, and Utilization of Technology and Systems	N/A		
4. Reporting Requirements			
A. Familiarization with regulatory requirements			
New Respondents	25	1	25
Existing Respondents	1	1	1
B. Required activities:			
New Respondents <sup>c, d</sup>			
i. Initial performance test	24	1	24
ii. Repeat of initial performance test <sup>e</sup>	24	0.2	4.8
Existing Respondents			
i. Monitoring of operating parameters and equipment: <sup>f</sup>	Included in 5E		
ii. Periodic 5-year performance testing <sup>g</sup>	24	1	24
C. Gather Existing Information	Included in 5D, 5E		
D. Write report <sup>c, d</sup>			
i. Notification of compliance status	4	1	4
ii. Notification of intent to construct a major source and review application	4	1	4
iii. Notification of initial construction/ reconstruction <sup>a</sup>	4	1	4
iv. Notification of actual startup	4	1	4
v. Notification of performance test	4	1	4
vi. Reports of performance test results	Included in 4B, 5E		
vii. Notification of periodic 5-year performance test <sup>g</sup>	4	1	4
viii. Reports of periodic 5-year performance test results <sup>g</sup>	Included in 4B, 5E		
ix. Semiannual compliance reports <sup>d</sup>	12	2	24
<b>Subtotal for Reporting Requirements</b>			
5. Recordkeeping Requirements			
A. Read instructions	Included in 4A		
B. Plan activities	10	1	10
C. Implement activities	Included in 4B		
D. Develop record system <sup>h</sup>	NA		
E. Time to enter and transmit all information into record system			
i. Record performance tests	4	1	4
ii. Record of periodic performance tests <sup>g</sup>	4	1	4
iii. Record operating parameters <sup>i</sup>	1	365	365
iv. Record deviations <sup>j</sup>	2	1	2
v. Continuous parameter monitoring calibration and maintenance <sup>l</sup>	4	5	20
vi. Store, file, and maintain records	20	1	20

F. Time to train personnel <sup>i</sup>	16	1	16
G. Time for audits	N/A		
<b>Subtotal for Recordkeeping Requirements</b>			
<b>Total Labor Burden and Costs (rounded) <sup>k</sup></b>			
<b>Total Capital and O&amp;M Cost (rounded) <sup>k</sup></b>			
<b>GRAND TOTAL (rounded) <sup>k</sup></b>			

**Assumptions:**

<sup>a</sup> There is an average of 8 existing respondents per year over the next three years of this ICR. In addition, we assume that no new respondents will be added during this period.

<sup>b</sup> This ICR uses the following labor rates: Managerial \$153.55 (\$73.12+ 110%); Technical \$122.20 (\$58.19 + 110%); and Clerical \$75.00 (\$35.71 + 110%). The rates are from the Bureau of Labor Statistics, March 2021, “Table 2. Civilian Workers, by occupational and industry group.” The rates are from the private industry category for the benefit packages available to those employed by private industry.

<sup>c</sup> New respondents would have to comply with the initial rule requirements including notifications and performance tests for a period of this ICR, therefore, there is no anticipated burden associated with these activities.

<sup>d</sup> We have assumed that the initial performance tests and reports are conducted by an emissions testing contractor, however, facility personnel will be present to assist the contractor.

<sup>e</sup> We have assumed that 20 percent of new respondents will have to repeat the performance tests due to failure. Since there are no existing respondents, this assumption does not apply.

<sup>f</sup> Monitoring and recordkeeping of operations for respondents with add-on control devices include: 1) specific operating parameters; 2) specific operating work practices.

<sup>g</sup> The rule requires periodic testing every 5 years. Based on a review of permit data collected during the recent RTR (2598.02, 2598.03, 2598.04, 2598.05, 2598.06, 2598.07, 2598.08, 2598.09, 2598.10, 2598.11, 2598.12, 2598.13, 2598.14, 2598.15, 2598.16, 2598.17, 2598.18, 2598.19, 2598.20, 2598.21, 2598.22, 2598.23, 2598.24, 2598.25, 2598.26, 2598.27, 2598.28, 2598.29, 2598.30, 2598.31, 2598.32, 2598.33, 2598.34, 2598.35, 2598.36, 2598.37, 2598.38, 2598.39, 2598.40, 2598.41, 2598.42, 2598.43, 2598.44, 2598.45, 2598.46, 2598.47, 2598.48, 2598.49, 2598.50, 2598.51, 2598.52, 2598.53, 2598.54, 2598.55, 2598.56, 2598.57, 2598.58, 2598.59, 2598.60, 2598.61, 2598.62, 2598.63, 2598.64, 2598.65, 2598.66, 2598.67, 2598.68, 2598.69, 2598.70, 2598.71, 2598.72, 2598.73, 2598.74, 2598.75, 2598.76, 2598.77, 2598.78, 2598.79, 2598.80, 2598.81, 2598.82, 2598.83, 2598.84, 2598.85, 2598.86, 2598.87, 2598.88, 2598.89, 2598.90, 2598.91, 2598.92, 2598.93, 2598.94, 2598.95, 2598.96, 2598.97, 2598.98, 2598.99, 2599.00, 2599.01, 2599.02, 2599.03, 2599.04, 2599.05, 2599.06, 2599.07, 2599.08, 2599.09, 2599.10, 2599.11, 2599.12, 2599.13, 2599.14, 2599.15, 2599.16, 2599.17, 2599.18, 2599.19, 2599.20, 2599.21, 2599.22, 2599.23, 2599.24, 2599.25, 2599.26, 2599.27, 2599.28, 2599.29, 2599.30, 2599.31, 2599.32, 2599.33, 2599.34, 2599.35, 2599.36, 2599.37, 2599.38, 2599.39, 2599.40, 2599.41, 2599.42, 2599.43, 2599.44, 2599.45, 2599.46, 2599.47, 2599.48, 2599.49, 2599.50, 2599.51, 2599.52, 2599.53, 2599.54, 2599.55, 2599.56, 2599.57, 2599.58, 2599.59, 2599.60, 2599.61, 2599.62, 2599.63, 2599.64, 2599.65, 2599.66, 2599.67, 2599.68, 2599.69, 2599.70, 2599.71, 2599.72, 2599.73, 2599.74, 2599.75, 2599.76, 2599.77, 2599.78, 2599.79, 2599.80, 2599.81, 2599.82, 2599.83, 2599.84, 2599.85, 2599.86, 2599.87, 2599.88, 2599.89, 2599.90, 2599.91, 2599.92, 2599.93, 2599.94, 2599.95, 2599.96, 2599.97, 2599.98, 2599.99, 2600.00), 1 asphalt roofing manufacturing facility and 3 asphalt processing facilities). We assume that testing occurs once every five years (4/5=0.8), plus 20% retest (0.8\*1.2 = 1 respondent/year, rounded). Therefore, this testing occurs for 1 respondent per year. We assume that testing is conducted by an emissions testing contractor, and facility personnel will work on-site to assist the contractor. We assume 4 asphalt roofing manufacturing facilities would conduct an EPA Method 25A test of the thermal oxidizer, and an EPA Method 9 opacity test; and 4 asphalt processing facilities would conduct an EPA Method 25A test of the thermal oxidizer, and an EPA Method 9 opacity test.

<sup>h</sup> We have assumed that new respondents already have the technology and recordkeeping systems in place to monitor its daily operations.

<sup>i</sup> We have assumed that it takes respondents the following approximate times to meet recordkeeping requirements: 1) one hour per year to provide maintenance to continuous parameter monitors, five times per year; and 3) and 16 hours per year to train new employees on recordkeeping requirements.

<sup>j</sup> We assume 15% of sources will have a deviation from an emission limitation. (8\*0.15=1.2, rounded to 1)

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

**ing Manufacturing (40 CFR Part 63, Subpart LLLLL) (Renewal)**

(D)	(E)	(F)	(G)	(H)
Respondents per year <sup>a</sup>	Technical person-hours per year (E=C*D)	Management person-hours per year (F=E*0.05)	Clerical person-hours per year (G=E*0.1)	Annual costs (\$) <sup>b</sup>
0	0	0	0	\$0
8	8	0.4	0.8	\$1,088.23
0	0	0	0	\$0
0	0	0	0	\$0
1	24	1.2	2.4	\$3,265
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
1	4	0.2	0.4	\$544
8	192	9.6	19.2	\$26,117.47
		<b>262</b>		<b>\$31,014</b>
0	0	0	0	\$0
0	0	0	0	\$0
1	4	0.2	0.4	\$544
8	2,920	146	292	\$397,203.22
1	2	0.1	0.2	\$272.06
8	160	8	16	\$21,764.56
8	160	8	16	\$21,764.56

Labor Rates	
Management	\$153.55
Technical	\$122.20
Clerical	\$61.51

0	0	0	0	\$0
	<b>3,733</b>			<b>\$441,549</b>
	<b>4,000</b>			<b>\$473,000</b>
				<b>\$84,900</b>
				<b>\$558,000</b>

222

hr/response

ew facilities will become subject to this regulation during the three-year period of this ICR.

ical \$61.51 (\$29.29 + 110%). These rates are from the United States Department of Labor, column 1, "Total compensation." The rates have been increased by 110 percent to account

ld-on control devices. There are no new respondents anticipated over the next three-year

ility personnel will also work on-site to assist the contractor.

10 new respondents estimated, this requirement does not apply.

eters for each control device established during the performance test, 2) deviations, and 3)

35 FR 14526), 3 of the 4 asphalt roofing manufacturing facilities and 1 of the 4 asphalt  
ludes the cost for the 4 remaining facilities not currently required to conduct periodic  
at 20 percent of respondents will repeat the performance tests due to failure. (4 respondents  
one respondent each year. We assume that the testing and reporting are conducted by an  
ufacturing facilities would conduct an EPA Method 5A test of the PM control device, an  
duct an EPA Method 25A test of the thermal oxidizer and an EPA Method 9 opacity test.

operations and to comply with existing regulations.

r per day for recording operating parameters, 365 days per year; 2) four hours to calibrate  
oyees on add-on control devices, continuous parameter monitoring technology, and

**Table 2: Average Annual EPA Burden and Cost – NESHAP for Asphalt Processing and Asphalt LLLLL) (Renewal)**

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>
<b>New Respondents: <sup>c</sup></b>				
i. Notification of compliance status	4	1	4	0
ii. Notification of intent to construct a major source and review application	4	1	4	0
iii. Notification of start of construction	2	1	2	0
iv. Notification of actual startup	2	1	2	0
v. Notification of initial performance test and test plan	4	1	4	0
vi. Report of performance test results including operating parameters	20	1	20	0
<b>Existing Respondents</b>				
i. Notification of periodic 5-Year performance testing <sup>d</sup>	4	1	4	1
ii. Report of periodic 5-Year performance testing <sup>d</sup>	20	1	20	1
ii. Review of semiannual compliance reports	8	2	16	8
<b>TOTAL (rounded) <sup>e</sup></b>				

**Assumptions:**

<sup>a</sup> There is an average of 8 existing respondents per year over the next three years of this ICR. In addition, we assume that n three-year period of this ICR.

<sup>b</sup> This cost is based on the average hourly labor rate as follows: Managerial \$69.04 (GS-13, Step 5, \$43.15 + 60%); Technic (GS-6, Step 3, \$17.33 + 60%). This ICR assumes that Managerial hours are 5 percent of Technical hours, and Clerical hour Office of Personnel Management (OPM), 2021 General Schedule, which excludes locality, rates of pay. The rates have bee available to government employees.

<sup>c</sup> New respondents are required to submit initial notifications and conduct a performance test for add-on control equipment. year period of this ICR, therefore, there is no anticipated burden associated with these activities.

<sup>d</sup> The rule requires periodic performance testing once every 5 years. We assume review of the notification will take 4 hours. We assume that 20 percent of periodic performance tests will be repeated due to failure. There are four sources that require testing under this rule. (4 respondents test once every five years (4/5=0.8), plus 20% retest (0.8\*1.2 = 1 respondent/ each year.

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

## Roofing Manufacturing (40 CFR Part 63, Subpart

(E)	(F)	(G)	(H)
Technical person-hours per year (E=CxD)	Management person-hours per year (Ex0.05)	Clerical person-hours per year (Ex0.1)	Cost, \$ <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	\$0
4	0.2	0.4	\$230
20	1.0	2.0	\$1,149
128	6.4	12.8	\$7,354.24
	<b>175</b>		<b>\$8,730</b>

Labor Rates	
Management	\$69.04
Technical	\$51.23
Clerical	\$27.73

10 new facilities will become subject to this regulation during the

cal \$51.23 (GS-12, Step 1, \$32.02 + 60%); and Clerical \$27.73  
 s are 10 percent of Technical hours. These rates are from the  
 n increased by 60 percent to account for the benefit packages

. There are no new respondents anticipated over the next three-

s and review of the periodic performance test report will take 20  
 do not already have testing requirements in their state permits and  
 (year, rounded)). Therefore, this testing occurs for one respondent

<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 compliance status	0	1	0
Notification of intent to construct a major source and review application	0	1	0
Notification of initial construction/reconstruction	0	1	0
Notification of actual startup	0	1	0
Notification of performance test and test plan	0	1	0
Report of performance test results	0	1	0
Notification of periodic performance test	1	1	0
Report of periodic performance test results	1	1	0
Report of semiannual compliance reports	8	2	0
			Total

<b>Capital/Startup vs. Operation and Maintenance (O&amp;M)</b>			
(A)	(B)	(C)	(D)
Continuous Monitoring Device	Capital/Startup Cost for One Respondent	Number of New Respondents <sup>a</sup>	Total Capital/Startup Cost, (B X C)
<i>Asphalt Roofing Manufacturing</i>			
PM control device - Testing <sup>b, c</sup>	\$83,100	0	\$0
Thermal oxidizer - Testing <sup>b, d</sup>	\$55,000	0	\$0
Opacity - Testing <sup>b, e</sup>	\$1,500	0	\$0
PM control device - Replace filters <sup>f</sup>		0	\$0
<i>Asphalt Processing</i>			
Thermal oxidizer - Testing <sup>b, g</sup>	\$44,000	0	\$0
Opacity - Testing <sup>b, e</sup>	\$1,500	0	\$0
<i>Asphalt Roofing Manufacturing and Asphalt Processing</i>			
CPMS for control device(s) <sup>h</sup>	N/A	0	\$0
<b>Total (rounded) <sup>i</sup></b>			\$0

<sup>a</sup> We assume no new sources will construct during the three-year period of this ICR.

<sup>b</sup> The rule requires periodic testing every 5 years. Based on a review of permit data collected during the recent manufacturing facilities and 1 of the 4 asphalt processing facilities already perform all periodic performance tests only includes the cost for the 4 remaining facilities not currently required to conduct periodic testing under State facility and 3 asphalt processing facilities). 1 asphalt roofing manufacturing facility tests once every five years facilities each test once every five years (3/5=0.6 respondents/year).

<sup>c</sup> We assume the contractor cost for PM control device performance testing using EPA Method 5A at an asphalt facility is \$83,100, based on a cost of \$16,500 for first filter and an add-on charge of \$11,100 for each additional filter.

<sup>d</sup> We assume the contractor cost for total hydrocarbon (THC) performance testing of a thermal oxidizer using EPA Method 17 facility is \$55,000.

<sup>e</sup> We assume the contractor cost for opacity testing using EPA Method 9 is \$1,500.

<sup>f</sup> The ongoing cost for replacement filters and data collection system maintenance is \$7,415. This value has been indexed to 2010.

<sup>g</sup> We assume the contractor cost for total hydrocarbon (THC) performance testing of a thermal oxidizer using EPA Method 17 facility is \$44,000.

<sup>h</sup> EPA assumes that all facilities subject to the standard have or will obtain add-on control devices that are already installed. This monitoring equipment is required not only for compliance purposes but also to operate the control devices.

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

<b>Data from RTR ICR 2598.02</b>			
<b>5-Year Periodic Testing Costs For Facilities Not Currently Required</b>			
<b>Industry Sub-Group</b>	<b>Number of Facilities Not Currently Required to Test Under State Permit <sup>a</sup> (\$)</b>	<b>Average PM Test Cost per Facility (\$)</b>	<b>Average VE or Opacity Test Cost per Facility (\$)</b>
Asphalt roofing manufacturing facilities	1	\$83,100.00	\$1,500.00
Asphalt processing facilities	3	\$0.00	\$1,500.00
Total - Asphalt roofing manufacturing facilities and Asphalt processing facilities	4		

<sup>a</sup> Includes Hunt Southland Refining Co. - Sandersville, Certainteed Corp. (Oxford, NC), Wynnewood Refining Co. (Wynnewood, OK)

Source: Appendix A from memo "Cost Impacts for the Asphalt Processing and Asphalt Roofing Manufacturing Facilities"

<b>Facility Name</b>	<b>City</b>	<b>State</b>	<b>State Required 5-yr Tests</b>
Hunt Refining Company	Tuscaloosa	AL	Yes
Owens-Corning	Minneapolis	MN	Yes
Hunt Southland Refining Co. - Sandersville	Heidelberg	MS	No
Certainteed Corp.	Oxford	NC	No
Owens-Corning Fiberglass Trumbull	Medina	OH	Yes
Wynnewood Refining Co.	Wynnewood	OK	No



Valero Refining Co.	Ardmore	OK	No
Certainteed Corp.	Shakopee	MN	Yes

<sup>1</sup> Cost of opacity testing using EPA Test Method 9 is estimated to be \$1,500. For each facility that has aspha

<sup>2</sup> Cost of PM performance testing using EPA Test Method 5A is estimated to be \$16,500 for first filter and c

<sup>3</sup> Cost of THC performance testing using EPA Test Method 25A is estimated to range from \$16,200 (concer

<sup>4</sup> Costs not included for these facilities because they are already required to test every 5-yrs by the State per

(E)
Total Annual Responses
0
0
0
0
0
0
1
1
16
18

<b>O&amp;M) Costs</b>		
(E)	(F)	(G)
Annual O&M Costs for One Respondent	Number of Respondents with O&M	Total O&M
\$83,100	0.2	\$16,620
\$55,000	0.2	\$11,000
\$1,500	0.2	\$300
\$7,415	4	\$29,662
\$44,000	0.6	\$26,400
\$1,500	0.6	\$900
N/A	0	\$0
		\$84,900

CEPCI Index	
2020	2003
596.2	402

RTR (2598.02, 85 FR 14526), 3 of the 4 asphalt roofing manufacturing under State Agency permits. Therefore, this ICR requires State Agency permits (1 asphalt roofing manufacturing (1/5=0.2 respondents/year). 3 asphalt processing

Asphalt roofing manufacturing facility with 7 PM filters is

EPA Method 25A at an asphalt roofing manufacturing

has been updated from year 2003 to year 2020 using the CEPCI

EPA Method 25A at an asphalt processing facility is

already equipped with continuous parameter monitoring and control equipment.

**Costs to Test Under State Permit**

Average THC Test Cost per Facility (\$)	Total Average Test Cost Per Facility (\$)	Total Cost for Facilities Not Currently Required to Test Under State Permit <sup>a</sup> (\$)
\$55,000.00	\$139,600.00	\$139,600
\$44,000.00	\$45,500.00	\$136,500
		\$276,100

Co., and Valero Refining Co.

from "Risk and Technology Review Proposal", September 2018

Asphalt Storage Tanks <sup>1</sup>	Number of PM Control Devices	Number of Thermal Oxidizers	VE or Opacity Test Cost <sup>1</sup> (\$)	PM Test Cost <sup>2</sup> (\$)	THC Test Cost <sup>3</sup> (\$)
Yes	0	1	1,500	0	44,000
Yes	3	1	1,500	38,700	44,000
Yes	0	1	1,500	0	44,000
Yes	7	2	1,500	83,100	88,000
Yes	4	1	1,500	49,800	44,000
Yes	0	1	1,500	0	44,000

Yes	0	1	1,500	0	44,000
Yes	3	1	1,500	38,700	44,000
<b>TOTAL COST OVER 5-YR PERIOD</b>					

alt storage tanks, it was assumed that the facility would have at least one Method 9 test.

an add-on charge of \$11,100 for each additional filter.

centration) to \$44,000 (efficiency). We chose to be conservative and apply the higher cost of \$44,000.

mitting agency and will not incur additional testing costs with the new testing requirements.

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<b>Total Test Cost (\$)</b>
see footnote 4
see footnote 4
45,500
172,600
see footnote 4
45,500

45,500
see footnote 4
<b>309,100</b>

