

**Annual Respondent Burden and Cost - NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart C)**

\$106.45      138.43      52.77

Burden Item	(A) Respondent Hours per Occurrence (Technical hours)	(B) Number of Occurrences per Respondent per Year	(C) Hours per Respondent per Year (C=A x B)	(D) Number of Respondents per Year <sup>a</sup>	(E) Technical Hours per Year (E=C x D)	(F) Management Hours per Year (F= E x 0.05)	(G) Clerical Hours per Year (G= E x 0.1)	Total Labor Costs per Year <sup>b</sup>
1. Applications	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2. Surveys and Studies	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
3. Reporting Requirements								
A. Familiarization with Regulatory Requirements	1	1	1	116	116	5.8	11.6	\$13,763.23
B. Required Activities								
i. Initial performance tests	24	1	24	0	0	0	0	\$0
ii. Repeat performance tests <sup>c</sup>	24	1	24	0	0	0	0	\$0
C. Create Information	See 3B							
D. Gather Existing Information	See 3E							
E. Write Report								
i. Notification of Construction/Reconstruction <sup>d</sup>	2	1	2	0	0	0	0	\$0
ii. Notification of Anticipated Startup <sup>d</sup>	2	1	2	0	0	0	0	\$0
iii. Notification of Actual Startup <sup>e</sup>	2	1	2	0	0	0	0	\$0
iv. Notification of Initial Performance Test <sup>d</sup>	2	1	2	0	0	0	0	\$0
v. Report of Performance Test	See 3B							
vi. Semiannual Work Practice Reports <sup>e,f</sup>	30	2	60	116	6,960	348	696	\$825,793.56
<b>Subtotal for Reporting Requirements</b>						<b>8,137</b>		<b>\$839,557</b>
4. Recordkeeping Requirements								
A. Familiarization with Regulatory Requirements	See 3A							
B. Plan Activities	See 3B							
C. Implement Activities	See 3B							
D. Develop Record System	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
E. Time to Enter Information								
i. Records of Operating Parameters <sup>f,g</sup>	2.5	365	912.5	116	105,850	5,292.5	10,585	\$12,558,943.73
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
G. Audits	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Subtotal for Recordkeeping Requirements</b>						<b>121,728</b>		<b>\$12,558,944</b>
<b>TOTAL ANNUAL BURDEN AND COST (Rounded)<sup>h</sup></b>						<b>130,000</b>		<b>\$13,400,000</b>

<b>Capital and O&amp;M Costs (See Section 6(b)(iii))</b>								<b>\$0</b>
<b>TOTAL COST (Rounded) <sup>h</sup></b>						<b>130,000</b>		<b>\$13,400,000</b>

**Table 1b: Annual Respondent Burden and Cost - NSPS for Equipment Leaks of VOC**

\$106.45

<b>Burden Item</b>	<b>(A) Respondent Hours per Occurrence (Technical hours)</b>	<b>(B) Number of Occurrences per Respondent per Year</b>	<b>(C) Hours per Respondent per Year (C=A x B)</b>	<b>(D) Number of Respondents per Year<sup>a</sup></b>	<b>(E) Technical Hours per Year (E=C x D)</b>
1. Applications	N/A	N/A	N/A	N/A	N/A
2. Surveys and studies	N/A	N/A	N/A	N/A	N/A
3. Reporting Requirements					
A. Familiarization with Regulatory Requirements	1	1	1	34.5	34.5
B. Required Activities					
i. Initial Performance Tests	24	1	24	0	0
ii. Repeat performance tests <sup>c</sup>	24	1	24	0	0
C. Create Information	See 3B				
D. Gather Existing Information	See 3E				
E. Write Report					
i. Notification of Construction/Reconstruction <sup>d</sup>	2	1	2	0	0
ii. Notification of Anticipated Startup <sup>d</sup>	2	1	2	0	0
iii. Notification of Actual Startup <sup>d</sup>	2	1	2	0	0
iv. Notification of Initial Performance Test <sup>d</sup>	2	1	2	0	0
v. Report of Performance Test	See 3B				
vi. Semiannual Work Practice Reports at Large Refineries <sup>e, f</sup>	30	2	60	34.5	2,070
vii. Semiannual Work Practice Reports at Small Refineries <sup>e, f</sup>	8	2	16	11.5	184
<b>Subtotal for Reporting Requirements</b>					
4. Recordkeeping Requirements					
A. Familiarization with Regulatory Requirements	See 3A				
B. Plan Activities	See 3B				
C. Implement Activities	See 3B				
D. Develop Record System	N/A	N/A	N/A	N/A	N/A
E. Time to Enter Information					
i. Records of Operating Parameters at Large Refineries <sup>g, h</sup>	2.64	365	963.6	40.25	38,784.90
ii. Records of Operating Parameters at Small Refineries <sup>g, h</sup>	2.66	365	970.9	5.75	5,582.68
F. Train Personnel	N/A	N/A	N/A	N/A	N/A
G. Audits	N/A	N/A	N/A	N/A	N/A
<b>Subtotal for Recordkeeping Requirements</b>					
<b>TOTAL ANNUAL BURDEN AND COST (Rounded)<sup>i</sup></b>					

<b>Capital and O&amp;M Costs (See Section 6(b)(iii))</b>					
<b>TOTAL COST (Rounded) <sup>i</sup></b>					

Assumptions

- <sup>a</sup> There are approximately 46 refineries (respondents) subject to the standard.
- <sup>b</sup> This ICR uses the following labor rates: \$106.45 (technical), \$138.43 (managerial), and \$52.77 (clerical). These rates Labor, Bureau of Labor Statistics, September 2015, “Table 2. Civilian Workers, by occupational and industry group.” compensation.” They have been increased by 110 percent to account for the benefit packages available to those employees.
- <sup>c</sup> Assume 20% of initial performance tests must repeat due to failure.
- <sup>d</sup> Owners or operators of the affected facilities must make one-time-only notifications.
- <sup>e</sup> The time to prepare reports is estimated to be the same under both subparts because the information in the new records not have to be reported.
- <sup>f</sup> Assume that 25 percent of the process units are located at small refineries (25% x 46 = 11.5). The rest are large facilities have fewer leaks and deviations so they can complete reports in less time. Larger facilities require significantly more time.
- <sup>g</sup> Although monitoring of the various components may be required on a weekly, monthly, quarterly, semiannual or annual components that must be monitored at any facility, monitoring overall occurs daily.

Assume that large facilities need an additional 0.14 hours per day to complete the tasks required by the new standards. Recordkeeping time for each day’s worth of monitoring for large facilities for Subpart GGGa is 2.64 hours and that monitoring time for small facilities is 2.66 hours. See Table 1a, Footnote G for the calculation for the time for calibration.

Small facilities may record instrument readings manually, so an additional 0.02 hours per day are needed for small refinery instrument readings. Therefore, it is assumed that the average recordkeeping time for each day’s worth of monitoring for small facilities is 2.66 hours and that monitoring is done 365 days a year.

<sup>h</sup> Assume that 25 percent of the process units are located at small refineries and half of those use manual recordkeeping (5.75) and that 75 percent of the process units are located at large refineries (46 x 75% = 34.5) and thus the number of process units for manual recordkeeping is (5.75 + 34.5 = 40.25)

<sup>i</sup> Totals are rounded to three significant figures. Figures may not add exactly due to rounding.

**Costs in Petroleum Refineries (40 CFR Part 60, Subpart GGGa) (Renewal) <sup>a</sup>**

138.43      52.77

<b>(F) Management Hours per Year (F= E x 0.05)</b>	<b>(G) Clerical Hours per Year (G= E x 0.1)</b>	<b>Total Labor Costs per Year <sup>b</sup></b>
N/A	N/A	N/A
N/A	N/A	N/A
1.73	3.45	\$4,093.37
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
103.5	207	\$245,602.40
9.2	18.4	\$21,831.32
<b>2,420</b>		<b>\$271,527</b>
N/A	N/A	N/A
1,939.25	3,878.49	###
279.13	558.27	\$662,376.01
N/A	N/A	N/A
N/A	N/A	N/A
<b>51,023</b>		<b>\$5,264,146</b>
<b>53,400</b>		<b>\$5,540,000</b>

		<b>\$0</b>
<b>53,400</b>		<b>\$5,540,000</b>

are from the United States Department of  
The rates are from column 1, "Total  
yed by private industry.

s must be maintained on-site, but it does

ies ( $75\% \times 46 = 34.5$ ). Small facilities  
me to complete reports.  
ual basis, given the number of

Therefore, it is assumed that the average  
onitoring is done 365 days a year. See

neries with manual recordkeeping of  
or small facilities for Subpart GGGa is

of instrument readings ( $46 \times 25\% \times 0.5 =$   
rocess units that do not need additional

Burden Item	(A) EPA Person- Hours per Occurrence	(B) Annual Occurrences per Respondent	(C) EPA Hours per Year (A x B)	(D) Plants per Year	(E) Technical Hours per Year (C x D)	(F) Management Hours per Year (E x 0.05)	(G) Clerical Hours per Year (E x 0.1)	(H) Annual Cost <sup>b</sup>	\$47.62	64.16	25.76
Performance Test Report Review (New Plants) <sup>a</sup>	4	1.2	4.8	0	0	0	0	\$0			
Notification of Construction	2	1	2	0	0	0	0	\$0			
Notification of Anticipated Startup	0.5	1	0.5	0	0	0	0	\$0			
Notification of Actual Startup	0.5	1	0.5	0	0	0	0	\$0			
Notification of Initial Test	0.5	1.2	0.6	0	0	0	0	\$0			
Review Test Results	8	1.2	9.6	0	0	0	0	\$0			
Report Review (Existing Plants)	4	2	8	116	928	46.4	92.8	\$49,558.91			
<b>TOTAL ANNUAL BURDEN AND COST(Rounded) <sup>c</sup></b>						<b>1,070</b>		<b>\$49,600</b>			

Assumptions

<sup>a</sup> Assume that 20 percent of the respondents will retest.

<sup>b</sup> This ICR uses the following labor rates: \$47.62 (technical), \$64.16 (managerial), and \$25.76 (clerical). These rates are from the Office of Personnel Management (OPM), 2016 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.

<sup>c</sup> Totals are rounded to three significant figures. Figures may not add exactly due to rounding.

**TABLE 2b: Annual Agency Burden and Cost - NSPS for Equipment Leaks of VOC**

<b>Burden Item</b>	<b>(A) EPA Person- Hours per Occurrence</b>	<b>(B) Annual Occurrences per Respondent</b>	<b>(C) EPA Hours per Year (A x B)</b>	<b>(D) Plants per Year</b>
Performance Test Report Review (New Plants) <sup>a</sup>	4	1.2	4.8	0
Notification of Construction	2	1	2	0
Notification of Anticipated Startup	0.50	1	0.5	0
Notification of Actual Startup	0.50	1	0.5	0
Notification of Initial Test	0.50	1.2	0.6	0
Review Test Results	8.00	1.2	9.6	0
Report Review (Existing Plants)	4	2	8	46
<b>TOTAL ANNUAL BURDEN AND COST(Rounded) <sup>c</sup></b>				

Assumptions

<sup>a</sup> Assume that 20 percent of the respondents will retest.

<sup>b</sup> This ICR uses the following labor rates: \$47.62 (technical), \$64.16 (managerial), and \$25.76 (clerical). These rates are based on the 2016 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for inflation.

<sup>c</sup> Totals are rounded to three significant figures. Figures may not add exactly due to rounding.



Costs in Petroleum Refineries (40 CFR Part 60, Subpart GGGa) (Renewal)

\$46.21      62.27      25.01

(E) Technical Hours per Year (C x D)	(F) Management Hours per Year (E x 0.05)	(G) Clerical Hours per Year (E x 0.1)	(H) Annual 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
368	18.4	36.8	\$19,071.42
<b>423</b>			<b>\$19,100</b>

Costs are from the Office of Personnel Management (OPM),  
 based on the unit for the benefit packages available to government

<b>Number of Respondents</b>				
	Respondents That Submit Reports		Respondents That Do Not Submit Any Reports	
Year	(A) Number of New Respondents	(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
1	0	116	0	0
2	0	116	0	0
3	0	116	0	0
Average	0	116	0	0

<sup>1</sup> New respondents include sources with constructed, reconstructed, and modified affected facilities.

#### Summary of Respondent Burden

Standard	Reporting Burden (hr)	Recordkeeping Burden (hr)	Total Burden (hr)	Total Cost (\$)
Subpart GGG	8,137	121,728	130,000	\$13,400,000
Subpart GGGa	2,420	51,023	53,400	\$5,540,000
<b>Total</b>			<b>183,000</b>	<b>\$18,900,000</b>

#### Summary of Agency Burden

Standard	Total EPA Burden (hr)	Total Cost (\$)
Subpart GGG	1,070	\$49,600
Subpart GGGa	423	\$19,100
<b>Total</b>	<b>1,490</b>	<b>\$68,700</b>

(E) Number of Respondents
(E=A+B+C-D)
116
116
116
116

<b>Total Annual Responses</b>				
(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
Subpart GGG Semiannual Reports	116	2	0	232
Subpart GGGa Semiannual Reports	46	2	0	92
			Total	324

<sup>1</sup> Annual occurrences of PRD reporting are not counted as separate responses because they are required to be submitted with the semiannual reports.

hrs/response:

566