

Table 1: Annual Respondent Burden and Cost – NSPS for Petroleum Refineries for which

Burden Item	(A) Person-hours per occurrence	(B) Number of occurrences per year per respondent^a	(C) Person-hrs. per respondent per year (C=AxB)
1. Applications	N/A		
2. Survey and Studies			
A. Flare Management Plan	160	2.89	462.4
B. Root Cause Analysis (flow)	45	4	180
C. Root Cause Analysis (sulfur)	24	3	72
3. Reporting Requirements			
A. Familiarize with rule requirements	1	1	1
B. Required Activities			
Initial performance tests ^d	40	6	240
Repeat of performance tests ^e	40	0.2	8
CEMS Audits (RAA or CGA)	36	6	216
Initial Relative Accuracy Test ^f	24	3.97	95.28
CMS Audits (RAA or CGA) ^f	36	3.97	142.92
C. Create Information	See 3B		
D. Gather Existing Information	See 3E		
E. Write Report ^g			
Notification of construction, reconstruction, or modification	2	9.89	19.78
Notification of anticipated startup	2	9.89	19.78
Notification of actual startup	2	9.89	19.78
Notification of initial performance test	2	8.89	17.78
Report of performance test	See 3B		
Semiannual Emissions Reports ^h	16	2	32
Subtotal for Reporting Requirements			
4. Recordkeeping Requirements			
A. Familiarize with rule requirements	See 3A		
B. Plan Activities	See 3B		
C. Implement Activities	See 3B		
D. Develop Record System	N/A		
E. Time to Enter Information			
Records of operating parameters ⁱ	0.25	350	87.5
F. Train Personnel	N/A		

G. Audits	N/A		
Subtotal for Recordkeeping Requirements			
TOTAL LABOR BURDEN AND COST (rounded^j)			
Capital and O&M Cost			
Grand TOTAL			

Assumptions

^a Occurrences per respondent per year is calculated as the number of occurrences per source per year multiplied by

^b Assume that there are approximately 150 plants (respondents) which become subject over a 3-year period. There is this ICR.

^c This ICR uses the following labor rates: \$129.93 per hour for Executive, Administrative, and Managerial labor; from the United States Department of Labor, Bureau of Labor Statistics, June 2014, Table 2. Civilian Workers, by rates have been increased by 110 percent to account for the benefit packages available to those employed by priva

^d We have assumed that it will take 40 hour for each respondent to perform initial performance tests. There are 6

^e We have assumed that 20 percent of sources would have to repeat performance test due to failure.

^f Assume that there are two monitors needed for each source, one to monitor sulfur content and one to monitor flc

^g We have assumed that each respondent will take 2 hours to write report.

^h We have assumed that each respondent will take 8 hours twice per year to complete semiannual reports

ⁱ Assume operation 350 days per year as specified in the NSPS review document.

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

h Construction, Reconstruction, or Modification Commenced after May 14, 2007 (40 CFR Par

103.97 123.93 51.79

(D) Respondents per year ^b	(E) Technical person-hrs. per year (E=CxD)	(F) Management person-hrs. per year (F=Ex0.05)	(G) Clerical person- hrs. per year (G=Ex0.1)	(H) Annual costs (\$) ^c
0	0	0	0	\$0
150	27,000	1,350	2,700	\$3,114,328.50
150	10,800	540	1,080	\$1,245,731.40
150	150	7.5	15	\$17,301.8
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	0	0
0	0	0	0	0
0	0	0	0	0
150	4,800	240	480	\$553,658.40
	49,163			\$4,931,020
150	13,125	656	1,313	\$1,513,909.69

	15,094			\$1,513,910
	64,300			\$6,440,000
				\$15,700,000
				\$22,100,000

y the number of sources per respondent (refinery).

There will be no additional new source that will become subject to the rule over the three years of

\$103.97 per hour for Technical labor, and \$51.79 per hour for Clerical labor. These rates are from the Occupational and Industry groups. The rates are from column 1, Total Compensation. The rates are for the entire industry.

CEM units at 18 plants (respondents).

Low rate.

t 60, Subpart Ja) (Renewal)

Table 2: Average Annual EPA Burden and Cost – NSPS for Petroleum Refineries for which Co

46.67

Activity	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=AxB)	(D) Respondents per year ^a	(E) Technical Person-hours per year (E=CxD)
New Plants:					
Report Review					
Notification of construction, reconstruction, or modification ^c	2	2.89	5.78	0	0
Notification of anticipated startup ^d	0.5	2.89	1.445	0	0
Notification of actual startup ^d	0.5	2.89	1.445	0	0
Notification of accuracy test ^d	0.5	1.98	0.99	0	0
Flare management plans ^e	1	2.89	2.89	0	0
Review test results	8	1.98	15.84	0	0
Emission Reports	4.2	2	8.4	0	0
Existing Plants:					
Semiannual Emissions Reports ^f	4.2	2	8.4	150	1260
TOTAL ANNUAL BURDEN AND COST (rounded^g)					

Assumptions:

- ^a We have assumed that there are approximately 150 respondents, with no additional new or reconstructed sources become
- ^b This cost is based on the following hourly labor rates times a 1.6 benefits multiplication factor to account for government
- ^c We have assumed that all existing new sources will take 2 hours to complete report.
- ^d We have assumed that all existing sources will each take 0.5 hours to complete report.
- ^e Some plans will need more review than others, depending on complexity of flare connections and baseline calculations;
- ^f We have assumed that all existing plants will be required to complete semiannual emissions reports.
- ^g Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Construction, Reconstruction, or Modification Commenced after May 14, 2007(40 CFR part 60,

62.9 25.25

(F) Management person-hours per year (Ex0.05)	(G) Clerical person- hours per year (Ex0.1)	(H) Cost, \$ ^b
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
0	0	\$0
63	126	\$65,948.40
1,450		\$65,900

ing subject to the rule over the next three years.

nt overhead expenses: \$62.90 for Managerial (GS-13, Step 5, \$39.31 x 1.6), \$46.67 for Technical (GS-12, Step 1, \$29.1

assume 1 hour is the average amount of time spent per plan.

subpart Ja) (Renewal)

17 x 1.6) and \$25.25 Clerical (GS-6, Step 3, \$15.78 x 1.6). These rates are from the Office of Personnel Managem

ent (OPM) 2014 General Schedule, which excludes locality rates of pay.