

**SUPPORTING STATEMENT
ENVIRONMENTAL PROTECTION AGENCY**

NSPS for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after May 14, 2007 (40 CFR Part 60, Subpart Ja) (Renewal)

1. Identification of the Information Collection

1(a) Title of the Information Collection

NSPS for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after May 14, 2007 (40 CFR Part 60, Subpart Ja) (Renewal), EPA ICR Number 2263.06, OMB Control Number 2060-0602.

1(b) Short Characterization/Abstract

The New Source Performance Standards (NSPS), for which Construction, Reconstruction, or Modification Commenced after May 14, 2007 (40 CFR Part 60, Subpart Ja) were proposed on May 14, 2007, promulgated on June 24, 2008, and amended on: September 26, 2008; September 12, 2012; December 19, 2013; December 1, 2015¹; and July 13, 2016². The provisions of Subpart Ja apply to the following affected facilities in petroleum refineries: fluid catalytic cracking units (FCCU), fluid coking units (FCU), delayed coking units, fuel gas combustion devices (FGCD), process heaters, flares and sulfur recovery plants. Except for flares, these regulations apply to affected facilities at existing and new petroleum refineries that are constructed, reconstructed, or modified after May 14, 2007. The provisions of this subpart apply to flares which commence construction, modification or reconstruction after June 24, 2008. New facilities include those that commenced construction, modification or reconstruction after the date of proposal. This information is being collected to assure compliance with 40 CFR Part 60, Subpart Ja.

In general, all NSPS standards require initial notifications, performance tests, and periodic reports by the owners/operators of the affected facilities. They are also required to maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, or any period during which the monitoring system is inoperative. These notifications, reports, and records are essential in determining compliance, and are required of all affected facilities subject to NSPS.

Any owner/operator subject to the provisions of this part shall maintain a file containing these documents and retain the file for at least two years following the generation date of such

1 In the December 1, 2015 amendments to Subpart Ja (80 FR 75177), EPA finalized technical corrections and clarifications for the New Source Performance Standards (NSPS) for petroleum refineries to improve consistency and clarity and address issues related to a 2008 industry petition for reconsideration. This amendment did not increase the estimated burden of the rule.

2 In the July 13, 2016 amendments to Subpart Ja (81 FR 45232), EPA amended Subpart Ja to revise compliance dates, add clarifications, and make technical corrections. This amendment did not affect the estimated burden of the existing rule.

maintenance reports and records. All reports are sent to the delegated state or local authority. If there is no such delegated authority, the reports are sent directly to the U.S. Environmental Protection Agency (EPA) regional office.

There are approximately 150 petroleum refineries, which are owned and operated by the petroleum refining industry (aka: the “Affected Public”). None of the 150 petroleum refineries in the United States are owned by either state, local, tribal or the Federal government. They are all privately-owned, for-profit businesses. The ‘burden’ to the Affected Public may be found below in Table 1: Annual Respondent Burden and Cost – NSPS for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after May 14, 2007 (40 CFR Part 60, Subpart Ja) (Renewal). The Federal Government’s ‘burden’ is attributed entirely to work performed by either Federal employees or government contractors and may be found below in Table 2: Average Annual EPA Burden and Cost – NSPS for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after May 14, 2007 (40 CFR Part 60, Subpart Ja) (Renewal). We assume that they will all respond.

Over the next three years, approximately 150 respondents per year will be subject to these standards. The estimated number of sources is based on the Agency’s industry analysis conducted for the 2015 rule amendment to the NESHAP for Petroleum Refineries, 40 CFR Part 63, Subpart CC. The Agency determined the number of sources by reviewing the EPA’s Petroleum Refinery Database as well as the Agency’s internal data sources. We assume that no petroleum refineries will either be constructed or reconstructed over the next three years of this ICR. However, we estimate that that two Subpart Ja affected facilities (FCCU, FCU, delayed coking units, FGCD, process heaters, flares, or sulfur recovery plants) at each of the 150 petroleum refineries will become subject to the provisions of Subpart Ja over the three-year period of this ICR (100 affected facilities per year) due to either construction, or reconstruction, or modification.

The Office of Management and Budget (OMB) approved the currently active ICR without any “Terms of Clearance”.

2. Need for and Use of the Collection

2(a) Need/Authority for the Collection

The EPA is charged under Section 111 of the Clean Air Act (CAA), as amended, to establish standards of performance for new stationary sources that reflect:

... application of the best technological system of continuous emissions reduction which (taking into consideration the cost of achieving such emissions reduction, or any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.
Section 111(a)(1).

The Agency refers to this charge as selecting the best demonstrated technology (BDT). Section 111 also requires that the Administrator review and, if appropriate, revise such standards every eight years. In addition, section 114(a) states that the Administrator may require any owner/operator subject to any requirement of this Act to:

(A) Establish and maintain such records; (B) make such reports; (C) install, use, and maintain such monitoring equipment, and use such audit procedures, or methods; (D) sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods, and in such manner as the Administrator shall prescribe); (E) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; (F) submit compliance certifications in accordance with Section 114(a)(3); and (G) provide such other information as the Administrator may reasonably require.

In the Administrator's judgment, PM, NO_x, CO, SO₂, H₂S and reduced sulfur compounds (RSC) emissions from petroleum refineries either cause or contribute to air pollution that may reasonably be anticipated to endanger public health and/or welfare. Therefore, the NSPS were promulgated for this source category at 40 CFR Part 60, Subpart Ja.

2(b) Practical Utility/Users of the Data

The recordkeeping and reporting requirements in these standards ensure compliance with the applicable regulations which were promulgated in accordance with the Clean Air Act. The collected information is also used for targeting inspections and as evidence in legal proceedings.

Performance tests are required in order to determine an affected facility's initial capability to comply with the emission standards. Continuous emission monitors are used to ensure compliance with these standards at all times. During the performance test a record of the operating parameters under which compliance was achieved may be recorded and used to determine compliance in place of a continuous emission monitor.

The notifications required in these standards are used to inform the Agency or delegated authority when a source becomes subject to the requirements of the regulations. The reviewing authority may then inspect the source to check if the pollution control devices are properly installed and operated, leaks are being detected and repaired, and that these standards are being met. The performance test may also be observed.

The required semiannual reports are used to determine periods of excess emissions, identify problems at the facility, verify operation/maintenance procedures and for compliance determinations.

3. Non-duplication, Consultations, and Other Collection Criteria

The requested recordkeeping and reporting are required under 40 CFR Part 60, Subpart Ja.

3(a) Non-duplication

If the subject standards have not been delegated, the information is sent directly to the appropriate EPA regional office. Otherwise, the information is sent directly to the delegated state or local agency. If a state or local agency has adopted its own similar standards to implement the Federal standards, a copy of the report submitted to the state or local agency can be sent to the Administrator in lieu of the report required by the Federal standards. Therefore, duplication does not exist.

3(b) Public Notice Required Prior to ICR Submission to OMB

An announcement of a public comment period for the renewal of this ICR was published in the *Federal Register* (83 FR 24785) on May 30, 2018. No comments were received on the burden published in the *Federal Register* for this renewal.

3(c) Consultations

The Agency has consulted industry experts and internal data sources to project the number of refineries, affected facilities, and industry growth over the next three years. The primary source of information as reported by industry, in compliance with the recordkeeping and reporting provisions in these standards, is the Integrated Compliance Information System (ICIS). ICIS is EPA's database for the collection, maintenance, and retrieval of compliance data for industrial and government-owned facilities. The growth rate for the industry is based on our consultations with the Agency's internal industry experts. In this ICR, the number of affected facilities complying with the requirements of Subpart Ja at a refinery is estimated on the basis that respondents (refineries) may elect to comply with either Subpart J or Ja for each of their existing affected facilities. For each existing affected facility (FCCU, FCU, delayed coking unit, FGCD, process heater, flare, or sulfur recovery plant) residing at a refinery, the respondent may elect to comply with Subpart J for one process, and Subpart Ja for another process. Therefore, the number of respondents (150) included in the estimate for this ICR assumes that each refinery has at least one affected facility complying with Subpart Ja.

Industry trade associations and other interested parties were provided an opportunity to comment on the burden associated with these standards as they were being developed and these same standards have been reviewed previously to determine the minimum information needed for compliance purposes. In developing this ICR, we contacted both the American Petroleum Industry at (202) 682-8340 and the American Fuel & Petrochemical Manufacturers (AFPM) at (202) 457-0480. The American Petroleum Institute replied and provided updated information on the number of affected process units and equipment, the capital cost of installing monitoring equipment, and O&M costs.

3(d) Effects of Less-Frequent Collection

Less-frequent information collection would decrease the margin of assurance that facilities are continuing to meet the standards. Requirements for information gathering and recordkeeping are useful techniques to ensure that good operation and maintenance practices are applied and emission limitations are met. If the information required by these standards was collected less frequently, the proper operation and maintenance of control equipment and the possibility of detecting violations would be less likely.

3(e) General Guidelines

These reporting or recordkeeping requirements do not violate any of the regulations promulgated by OMB under 5 CFR Part 1320, Section 1320.5.

3(f) Confidentiality

Any information submitted to the Agency for which a claim of confidentiality is made will be safeguarded according to the Agency policies set forth in Title 40, chapter 1, part 2, subpart B - Confidentiality of Business Information (CBI) (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 40000, September 8, 1978; 43 FR 42251, September 20, 1978; 44 FR 17674, March 23, 1979).

3(g) Sensitive Questions

The reporting or recordkeeping requirements in these standards do not include sensitive questions.

4. The Respondents and the Information Requested

4(a) Respondents/SIC Codes

The respondents to the recordkeeping and reporting requirements are petroleum refineries that were constructed, modified, or reconstructed after May 14, 2007. The United States Standard Industrial Classification (SIC) code for the respondents affected by these standards is SIC 2911 which corresponds to the North American Industry Classification System (NAICS) 324110 for Petroleum Refineries.

4(b) Information Requested

(i) Data Items

In this ICR, all the data that are recorded or reported is required by the NSPS for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after May 14, 2007 (40 CFR Part 60, Subpart Ja).

A source must make the following reports:

Notifications	
Initial notifications:	§60.7(a)
Construction/reconstruction	§60.7(a)(1)
Actual Start-up	§60.7(a)(3)
Physical or Operational Change	§60.7(a)(4)
Demonstration of continuous monitoring system (CMS)	§60.7(a)(5)
Initial performance test results	§60.8(a), §60.104a(a)
Notification of initial performance test	§60.8(d), §60.104a(a)
Notification of Compliance status	§60.11(a), (b), (c)
Alternative means of emission limitation	§60.103a(j)
Monitoring plan for each baghouse and bag leak detection system.	§60.105a(c)(2)
Submit measurement data for CEMS and CPMS for FCCU and FCU	§60.105a(h)(3)
Exemption from monitoring	§60.107a(b)(1)
the specific monitoring provisions of §60.105a, §60.106a and §60.107a with which the owner or operator intends to comply	§60.108a(a-b)

Reports	
Annual PM performance tests on FCCU or FCU	§60.104a(b)
Periodic start-up, shutdown, malfunction reports	§60.8(c)
Flare management plan	§60.103a(b)
Excess emissions report	§60.7(c), §60.108a(d)

A source must keep the following records:

Recordkeeping	
Start-ups, shutdowns, malfunctions, periods where the continuous monitoring system is inoperative	§60.7(b)
All reports and notifications	§60.7
Emission test methods and other data needed to determine emissions	§60.104a
Flare management plan	§60.103a(a), §60.108a(c)(1)

Recordkeeping	
Information to document conformance with bag leak detection system operation and maintenance requirements, alarms	§60.108a(c)(2)
Bag leak detection system alarms and actions	§60.108a(c)(3)
Coke burn-off rate and hours of operation for FCCU and FCU	§60.108a(c)(4)
Exemption determined to apply for each fuel gas stream.	§60.108a(c)(5)
Discharges above limit from flares, FGCD, or sulfur recovery plant and results of root cause analyses and corrective action analyses	§60.103a(c), §60.108a(c)(6)
H ₂ S discharges from flares [sample analyses, calculated ratios]	§60.108a(c)(7)

Electronic Reporting

Some of the respondents are using monitoring equipment that automatically records parameter data. Although personnel at the affected facility must still evaluate the data, internal automation has significantly reduced the burden associated with monitoring and recordkeeping at a plant site.

(ii) Respondent Activities

Respondent Activities
Familiarization with the regulatory requirements.
Install, calibrate, maintain, and operate CMS for opacity, CO, SO ₂ , and O ₂ .
Perform initial performance test, Reference Method 1; 2; 3, 3A or, 3B; 5, 5B or, 5F; 6, 6A or 6C; 7, 7A, 7C, 7D or 7E; 10, 10A or 10B; 11; 15 or 15A; 16. Repeat performance tests if necessary.
Write the notifications and reports listed above.
Enter information required to be recorded above.
Submit the required reports developing, acquiring, installing, and utilizing technology and systems for the purpose of collecting, validating, and verifying information.
Develop, acquire, install, and utilize technology and systems for processing and maintaining information.
Develop, acquire, install, and utilize technology and systems for disclosing and providing information.
Train personnel to be able to respond to a collection of information.
Transmit, or otherwise disclose the information.

5. The Information Collected: Agency Activities, Collection Methodology, and Information

Management

5(a) Agency Activities

EPA conducts the following activities in connection with the acquisition, analysis, storage, and distribution of the required information:

Agency Activities
Observe initial performance tests and repeat performance tests if necessary.
Conduct on-site inspections as necessary.
Review notifications and reports, including performance test reports, excess emissions reports, flare management plans, and requests for site-specific process heater emissions limits required to be submitted by industry.
Audit facility records.
Input, analyze, and maintain data in the Enforcement and Compliance History Online (ECHO) and the Integrated Compliance Information System (ICIS).

5(b) Collection Methodology and Management

Following notification of startup, the reviewing authority could inspect the source to determine whether the pollution control devices are properly installed and operated. Performance test reports are used by the Agency to discern a source's initial capability to comply with the emission standard. Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs. The semiannual reports are used for problem identification, as a check on source operation and maintenance, and for compliance determinations.

Information contained in the reports is reported by state and local governments in the ICIS Air database, which is operated and maintained by EPA's Office of Compliance. ICIS is EPA's database for the collection, maintenance, and retrieval of compliance data for industrial and government-owned facilities. EPA uses ICIS for tracking air pollution compliance and enforcement by local and state regulatory agencies, EPA regional offices and EPA headquarters. EPA and its delegated Authorities can edit, store, retrieve and analyze the data.

The records required by this regulation must be retained by the owner/operator for two years.

5(c) Small Entity Flexibility

The majority of the respondents are large entities (i.e., large businesses). However, the impact on small entities (i.e., small businesses) was taken into consideration during the development of the regulation. The recordkeeping and reporting requirements were selected

within the context of Subpart Ja and the specific process equipment and pollutants. Due to technical considerations involving the process operations and the types of control equipment employed, the recordkeeping and reporting requirements are the same for both small and large entities. The Agency considers these to be the minimum requirements needed to ensure compliance and, therefore, cannot reduce them further for small entities. To the extent that larger businesses can use economies of scale to reduce their burden, the overall burden will be reduced.

5(d) Collection Schedule

The specific frequency for each information collection activity within this request is shown below in Table 1: Annual Respondent Burden and Cost – NSPS for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after May 14, 2007 (40 CFR Part 60, Subpart Ja) (Renewal).

6. Estimating the Burden and Cost of the Collection

Table 1 documents the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry for the subpart included in this ICR. The individual burdens are expressed under standardized headings believed to be consistent with the concept of ‘Burden’ under the Paperwork Reduction Act. Where appropriate, specific tasks and major assumptions have been identified. Responses to this information collection are mandatory.

The Agency may neither conduct nor sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number.

6(a) Estimating Respondent Burden

The average annual burden to industry over the next three years from these record-keeping and reporting requirements is estimated to be 355,000 hours (Total Labor Hours from Table 1 below). These hours are based on Agency studies and background documents from the development of the regulation, Agency knowledge and experience with the NSPS program, the previously-approved ICR, and any comments received.

6(b) Estimating Respondent Costs

(i) Estimating Labor Costs

This ICR uses the following labor rates:

Managerial	\$147.40 (\$70.19+ 110%)
Technical	\$117.92 (\$56.15 + 110%)
Clerical	\$57.02 (\$27.15 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2018, “Table 2. Civilian Workers, by occupational and industry group.” The rates are from column 1, “Total compensation.” The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

(ii) Estimating Capital/Startup and Operation and Maintenance Costs

The type of industry costs associated with the information collection activities in the subject standard(s) are both labor costs which are addressed elsewhere in this ICR and the costs associated with continuous monitoring. The capital/startup costs are one-time costs when a facility or an affected source at a facility becomes subject to these regulations. The annual operation and maintenance costs are the ongoing costs to maintain the monitors and other costs such as photocopying and postage. The capital costs and the operation and maintenance costs for this ICR include the CEMS and CPMS for affected flares and the CEMS/CPMS costs for the other affected facilities, including process heaters.

(iii) Capital/Startup vs. Operation and Maintenance (O&M) Costs

Capital/Startup vs. Operation and Maintenance (O&M) Costs						
(A) Continuous Monitoring Device	(B) Capital/ Startup Cost for One Respondent ^a	(C) Number of New Respondents ^a	(D) Total Capital/ Startup Cost, (B X C)	(E) Annual O&M Costs for One Respondent ^a	(F) Number of Respondents with O&M ^a	(G) Total O&M, (E X F)
<i>New Affected Facilities^{b,c}</i>						
H ₂ S CEMS – Flares	\$372,000 ^d	16	\$5,952,000	\$62,000 ^e	32	\$1,984,000
Flare Vent Flow CPMS						
CEMS – FCCU, FCU, FGCD, Sulfur plant _f	\$161,000 ^g	34	\$5,474,000	\$25,000 ^h	68	\$1,700,000
CPMS – FCCU, FCU, FGCD, Sulfur plant _f	\$86,000 ⁱ	34	\$2,924,000	\$100,000 ^j	68	\$6,800,000
<i>Existing Affected Facilities^k</i>						
H ₂ S CEMS – Flares	\$372,000 ^d	0	\$0	\$62,000 ^e	280	\$17,360,000
Flare Vent Flow CPMS						
CEMS – FCCU, FCU, FGCD, Sulfur plant	\$161,000 ^g	0	\$0	\$25,000 ^h	600	\$15,000,000
CPMS – FCCU, FCU, FGCD, Sulfur plant	\$86,000 ⁱ	0	\$0	\$50,000 ^l	900	\$45,000,000
Total ^m		50	\$14,400,000			\$87,800,000

Footnotes:

^a In this table, the number of respondents corresponds to: 1) the number of new affected facilities (Flares, FCCU, FCU, FGCD, Sulfur plant) being constructed, re-constructed, or modified each year during this ICR period, or 2) the

number of existing affected facilities (Flares, FCCU, FCU, FGCD, Sulfur plant) already complying with Subpart Ja.

^b Per comments received from API/AFPM, we assume that two facilities at each of the 150 petroleum refineries become subject to the provisions of Subpart Ja over the three-year period of this ICR (300 facilities over three years or 100 new affected facilities per year) due to being constructed, reconstructed, or modified and that half of these new affected facilities will have capital and startup costs (50 facilities per year).

^c Based on the number of existing flare units, we assume that 32% of the new affected facilities are flares and that 68% of the new facilities are FCCU, FCU, FGCD, Sulfur Plant, or other process units.

^d Assume that capital/startup costs for a new flare sulfur CEMS and flow monitor CPMS is \$372,000 (Docket Document EPA-HQ-OAR-2007-0011-0289, page 11). Capital costs have been increased from 2006 to 2018 \$ using the CEPCI Equipment Cost Index.

^e Assume that the annual O&M costs of the flare sulfur CEMS and vent gas flow monitor is \$62,000 (Docket Document EPA-HQ-OAR-2007-0011-0289, page 11). Costs have been increased from 2006 to 2018 \$ using the CEPCI Equipment Cost Index.

^f Per comments received from API/AFPM, we assume that each new affected source requires one CEMS and two CPMS.

^g Assume that capital/ startup costs for a new FCCU NOx analyzer are \$161,000 (Docket Document EPA-HQ-OAR-2007-0011-0222, page 8). Capital costs have been increased from 2006 to 2018 \$ using the CEPCI Equipment Cost Index.

^h Per comments received from API/AFPM, we assume that O&M cost for each CEMS includes daily checks of 30 minutes, preventative maintenance, and parts for a total cost of \$25,000 per year.

ⁱ Assume that capital/startup costs for a single CPMS monitor are \$43,000 and there are two CPMS per new affected facility.

^j Assume that annual O&M costs for a single CPMS are \$50,000 and there are two CPMS per new affected facility.

^k Assumes that 70% (280) of the 400 flares at petroleum refineries are already subject to the provisions of Subpart Ja and each has one H₂S CEMs and one flow CPMS. The other 30% of flares are expected to use the monitoring alternative for emergency flares and flares with flare gas recovery system. For other existing affected facilities (FCCU, FCU, FGCD, Sulfur Plant, or other process unit), we assume there are 4 CEMS and 6 CPMS at each petroleum refinery, for a total of 600 CEMS (4 x 150 = 600) and 900 (6 x 150) CPMS.

^l Assume that annual O&M costs for a single CPMS are \$50,000.

^m Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding. Some double counting occurs due to counting costs for CEMS and CPMS separately.

The total capital/startup costs for this ICR are \$14,400,000. This is the total of column D in the above table.

The total operation and maintenance (O&M) costs for this ICR are \$87,800,000. This is the total of column G.

The average annual cost for capital/startup and operation and maintenance costs to industry over the next three years of the ICR is estimated to be \$102,000,000. These are recordkeeping costs

6(c) Estimating Agency Burden and Cost

The only costs to the Agency are those costs associated with analysis of the reported information. EPA's overall compliance and enforcement program includes such activities as the examination of records maintained by the respondents, periodic inspection of sources of emissions, and the publication and distribution of collected information.

The average annual Agency cost during the three years of the ICR is estimated to be \$156,000.

This cost is based on the average hourly labor rate as follows:

Managerial	\$65.71 (GS-13, Step 5, \$41.07 + 60%)
Technical	\$48.75 (GS-12, Step 1, \$30.47 + 60%)
Clerical	\$26.38 (GS-6, Step 3, \$16.49 + 60%)

These rates are from the Office of Personnel Management (OPM), 2018 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to Federal government employees. Details upon which this estimate is based appear below in Table 2: Average Annual EPA Burden and Cost – NSPS for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after May 14, 2007 (40 CFR Part 60, Subpart Ja) (Renewal).

6(d) Estimating the Respondent Universe and Total Burden and Costs

Based on our research for this ICR, on average over the next three years, approximately 150 existing respondents will be subject to these standards. It is estimated that no new petroleum refineries will be built, so no additional respondents per year will become subject to these same standards. The overall average number of respondents, as shown in the table below, is 150 per year.

The number of respondents is calculated using the following table that addresses the three years covered by this ICR:

Number of Respondents					
	Respondents That Submit Reports		Respondents That Do Not Submit Any Reports		
Year	(A) Number of New Respondents ¹	(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	100	150	0	100	150
2	100	150	0	100	150
3	100	150	0	100	150
Average	100	150	0	100	150

¹ New respondents include sources with constructed, reconstructed and modified affected facilities.

Column D is subtracted to avoid double-counting respondents. As shown above, the average Number of Respondents over the three-year period of this ICR is 150.

The total number of annual responses per year is calculated using the following table:

Total Annual Responses				
(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 $E=(B \times C)+D$
Initial notification of construction/ reconstruction	100	1	0	100
Notification of anticipated startup	100	1	0	100
Notification of actual startup	100	1	0	100
Notification of performance test	100	1	0	100
Flare management plan	32	1	0	32
Performance test results	100	1	0	100
Semiannual reports of excess emission	150	2	0	300
			Total	832

The number of Total Annual Responses is 832. Note that 100 respondents have been double counted in the above table because they have both existing affected facilities and new affected facilities.

The total annual labor costs are \$40,500,000. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NSPS for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after May 14, 2007 (40 CFR Part 60, Subpart Ja) (Renewal).

6(e) Bottom Line Burden Hours and Cost Tables

The detailed bottom line burden hours and cost calculations for the respondents and the Agency are shown below in Tables 1 and 2, respectively, and summarized below.

(i) Respondent Tally

The total annual labor hours are 355,000 hours (rounded). Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NSPS for

Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after May 14, 2007 (40 CFR Part 60, Subpart Ja) (Renewal).

We assume that burdens for managerial tasks take 5% of the time required for technical tasks because the typical tasks for managers are to review and approve reports. Clerical burdens are assumed to take 10% of the time required for technical tasks because the typical duties of clerical staff are to proofread the reports, make copies and maintain records.

Furthermore, the annual public reporting and recordkeeping burden for this collection of information is estimated to average 427 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are \$102,000,000. The cost calculations are detailed in Section 6(b)(iii), Capital/Startup vs. Operation and Maintenance (O&M) Costs.

(ii) The Agency Tally

The average annual Agency burden and cost over next three years is estimated to be 3,290 labor hours at a cost of \$156,000; see below in Table 2: Average Annual EPA Burden and Cost – NSPS for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after May 14, 2007 (40 CFR Part 60, Subpart Ja) (Renewal).

We assume that burdens for managerial tasks take 5% of the time required for technical tasks because the typical tasks for managers are to review and approve reports. Clerical burdens are assumed to take 10% of the time required for technical tasks because the typical duties of clerical staff are to proofread the reports, make copies and maintain records.

6(f) Reasons for Change in Burden

The increase in burden from the most recently-approved ICR is not due to any program changes, but it does reflect several adjustments.

The adjustment increase in ‘burden’ from the most recently-approved ICR is due to an increase in the estimates for the number of existing facilities located at petroleum refineries that become subject to the requirements of Subpart Ja because they are newly constructed, reconstructed or modified. Section 6(b)(iii) of the previous ICR renewal estimated that approximately 54 facilities with 2 CEMS each would become affected facilities subject to the rule each year. In this renewal ICR, that estimate has been increased to 100 facilities with 3 CEMS/CPMS each. The increase in burden is due to an increase in the estimates for the number of new, reconstructed, or modified facilities that are required to conduct initial performance tests on the equipment and the emissions and parameter monitors (CEMS and CPMS). For each startup and test of new, modified, or reconstructed equipment, there are numerous notifications and reports that must be submitted and reviewed. The adjustment increase in burden also reflects an increase in the number of CEMS and CPMS monitors on existing affected facilities that

require routine performance audits (Relative Accuracy Audits or Cylinder Gas Audits) and relative accuracy testing; these costs were not included in the prior ICR.

The increase in burden also reflects an increase in the estimates for the costs of new equipment and the required CEMS/CPMS monitors. Section 6(b)(iii) of the previous ICR renewal did not include the capital/startup costs for new, modified, or reconstructed equipment/process lines. This ICR estimates that, out of 100 facilities per year that become subject to the rule due to either construction, or modification, or reconstruction, 50 of these affected facilities per year will incur significant capital/startup costs.

The increase in capital and O&M costs from the most recently-approved ICR also reflects an increase in the estimates for the number of existing facilities located at petroleum refineries that are already subject to the requirements of Subpart Ja. The O&M costs for the CEMS and CPMS monitors on these existing facilities (280 flares and 600 other process units) were not accounted for in the prior ICR and are significant. The estimates of O&M costs for CEMS monitors have also been increased from approximately \$15,000 per year to \$25,000 per year based on comments provided by industry.

6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 427 hours per response. ‘Burden’ means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information either to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may neither conduct nor sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB Control Number. The OMB Control Numbers for EPA regulations are listed at 40 CFR Part 9 and 48 CFR Chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OECA-2011-0228. An electronic version of the public docket is available at <http://www.regulations.gov/>, which may be used to obtain a copy of the draft collection of information, submit or view public comments, access the index listing of the contents of the docket, and to access those documents in the public docket that are available electronically. When in the system, select “search,” then key in the docket ID number identified in this document. The documents are also available for public viewing at the Enforcement and Compliance Docket and Information Center in the EPA Docket Center (EPA/DC), WJC West,

Room 3334, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the docket center is (202) 566-1752. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OECA-2011-0228 and OMB Control Number 2060-0602 in any correspondence.

Part B of the Supporting Statement

This part is not applicable because no statistical methods were used in collecting this information.

Table 1: Annual Respondent Burden and Cost – NSPS for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007 (40 CFR Part 60, Subpart Ja) (Renewal)

Burden Item	(A) Person- hours per occurrenc e	(B) Number of occurrences per year per respondent ^a	(C) Person- hrs. per respondent per year (C=AxB)	(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
1. Applications	N/A							
2. Survey and Studies								
A. Flare Management Plan	160	1	160	0	0	0	0	\$0
B. Flare Management Plan Revision	8	1	8	32	256	13	26	\$33,534
C. Root Cause Analysis (flow)	45	4	180	150	27,000	1,350	2,700	\$3,536,784.00
D. Root Cause Analysis (sulfur)	24	3	72	150	10,800	540	1,080	\$1,414,713.60
3. Reporting Requirements								
A. Familiarize with rule requirements	1	1	1	150	150	7.5	15	\$19,648.8
B. Required Activities								
Initial performance tests on new facilities ^d	40	1	40	100	4,000	200	400	\$523,968.00
Repeat of initial performance tests on new facilities ^e	40	0.05	2	100	200	10	20	\$26,198.40
Initial CEMS Audits (RAA or CGA) new facilities ^f	36	1	36	100	3,600	180	360	\$471,571.20
CEMS Audits (RAA or CGA) existing facilities ^g	36	5.9	211	150	31,680	1,584	3,168	\$4,149,826.56
Initial Relative Accuracy Test new facilities ^f	24	6	144	100	14,400	720	1,440	\$1,886,284.80
Relative Accuracy Test existing facilities ^g	24	27.5	659	150	98,880	4,944	9,888	\$12,952,488.96
Initial CPMS Audits (RAA or CGA) new facilities ^f	36	4	144	100	14,400	720	1,440	\$1,886,284.80
CPMS Audits (RAA or CGA) existing facilities ^g	36	15.7	566	150	84,960	4,248	8,496	\$11,129,080.32

C. Create Information	See 3B							
D. Gather Existing Information	See 3E							
E. Write Report ^h								
Notification of construction, reconstruction, or modification	2	1	2	100	200	10	20	\$26,198.40
Notification of anticipated startup	2	1	2	100	200	10	20	\$26,198.40
Notification of actual startup	2	1	2	100	200	10	20	\$26,198.40
Notification of initial performance test	2	1	2	100	200	10	20	\$26,198.40
Report of performance test	See 3B							
Semiannual Emissions Reports ⁱ	16	2	32	150	4,800	240	480	\$628,761.60
Subtotal for Reporting Requirements						340,315		\$38,763,939
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 ^j	0.25	350	87.5	150	13,125	656	1,313	\$1,719,270.00
F. Train Personnel	N/A							
G. Audits	N/A							
Subtotal for Recordkeeping Requirements						15,094		\$1,719,270
Total Labor Burden and Cost (rounded)^k						355,000		\$40,500,000
Total Capital and O&M Cost (rounded)^k								\$102,000,000
Grand TOTAL (rounded)^k								\$143,000,000

Assumptions

^a Occurrences per respondent per year is calculated as the number of affected facilities (flares, FCCU, FCU, FGCD, sulfur plant) times the occurrences per affected

facility per respondent (refineries). For CEMS/CPMS Audits or RATA testing, this value refers to the number of monitors on an affected facility that requires audit or testing.

^b Assume that there are approximately 150 petroleum refineries (respondents) that are subject to the rule over a 3-year period with at least one affected source. There will be no additional new petroleum refineries that will become subject to the rule over the three-year period of this ICR, but we assume that two facilities at each of the 150 petroleum refineries will become subject to the provisions of Subpart Ja over the three-year period of this ICR (100 affected facilities per year) due to being constructed, reconstructed, or modified and that these facilities will have initial performance testing costs. We assume 32 of these affected facilities will be flares.

^c This ICR uses the following labor rates: \$147.40 per hour for Executive, Administrative, and Managerial labor; \$117.92 per hour for Technical labor, and \$57.02 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2018, "Table 2. Civilian Workers, by Occupational and Industry group." The rates are from column 1, "Total Compensation." The rates have been increased by 110% to account for the benefit packages available to those employed by private industry.

^d We have assumed that it will take 40 hours for each respondent to perform initial performance tests.

^e We have assumed that 5 percent of sources would have to repeat performance test due to failure.

^f We assume that two facilities at each of the 150 petroleum refineries will become subject to the provisions of Subpart Ja over the three-year period of this ICR (100 affected facilities per year) due to being constructed, reconstructed, or modified and that these facilities will have initial performance testing costs. We assume one CEMS monitor and two CPMS monitors needed for each newly affected facility. We assume that each new CEMS and CPMS monitor is audited at startup and once again in the first year (2x/yr), and that Relative Accuracy Audits or Cylinder Gas Audits take 36 hours. We assume that one initial relative accuracy test is required for each new CEMS and CPMS monitor (3 per new affected facility), that the relative accuracy test or RATA are conducted twice a year (3 x 2/yr), and take 24 hours per monitor.

^g Subpart Ja requires regular relative accuracy evaluations of all monitors on existing affected facilities. We assume there are 5.9 CEMS at each refinery (280 flare CEMS + 600 other equipment CEMS)/150 refineries), that these CEMS are audited once per year, and that the Relative Accuracy Audits or Cylinder Gas Audits take 36 hours. We assume that relative accuracy tests are required for each CEMS and CPMS monitor (3 per existing affected facility), that there are 13.7 CEMS and CPMS per refinery (280 flare CEMS + 280 flare CPMS + 600 other equipment CEMS + 900 other equipment CPMS)/150 refineries, that the relative accuracy test or RATA are conducted twice a year, and take 24 hours per monitor. We assume there are 7.9 CPMS at each refinery (280 flare CPMS + 900 other equipment CPMS)/150 refineries), that these CPMS are audited twice per year, and that these Relative Accuracy Audits or Cylinder Gas Audits take 36 hours.

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

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

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

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

Table 2: Average Annual EPA Burden and Cost – NSPS for Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After May 14, 2007 (40 CFR Part 60, Subpart Ja) (Renewal)

Activity	(A) Person- hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person- hours per respondent per year (C=AxB)	(D) Respondent s per year ^a	(E) Technica l Person- hours per year (E=CxD)	(F) Managemen t person- hours per year (Ex0.05)	(G) Clerical person- hours per year (Ex0.1)	(H) Cost, \$ ^b
New Affected Facilities:								
Report Review								
Notification of construction, reconstruction, or modification ^c	2	1	2	100	200	10	20	\$10,935
Notification of anticipated startup ^d	0.5	1	0.5	100	50	2.5	5	\$2,734
Notification of actual startup ^d	0.5	1	0.5	100	50	2.5	5	\$2,734
Notification of performance test ^d	0.5	1	0.5	100	50	2.5	5	\$2,734
Flare management plans ^e	1	1	1	32	32	1.6	3.2	\$1,750
Review performance test results	8	1	8	100	800	40	80	\$43,739
Emission Reports	4.2	1	4.2	100	420	21	42	\$22,963
Existing Plants:								
Semiannual Emissions Reports ^f	4.2	2	8.4	150	1260	63	126	\$68,888.61
TOTAL (rounded) ^g						3,290		\$156,000

Assumptions:

^a Assume that there are approximately 150 petroleum refineries (respondents) that are subject to the rule over a 3-year period. There will be no additional new petroleum refineries that will become subject to the rule over the three-year period of this ICR, but we assume that two facilities at each of the 150 petroleum refineries will become subject to the provisions of Subpart Ja over the three-year period of this ICR (100 affected facilities per year) due to being constructed, reconstructed, or modified and that these facilities will perform initial performance testing. We assume 32 of these newly affected facilities will be flares.

^b This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for government overhead expenses: Managerial rate of \$65.71 (GS-13, Step 5, \$41.07 + 60%), Technical rate of \$48.75 (GS-12, Step 1, \$30.47 + 60%), and Clerical rate of \$26.38 (GS-6, Step 3, \$16.49 + 60%). These rates are from the Office of Personnel Management (OPM) “2018 General Schedule” which excludes locality rates of pay.

^c We have assumed that all sources with newly affected facilities (due to being constructed, reconstructed, or modified) will take 2 hours to complete report.

^d We have assumed that all sources with newly affected facilities (due to being constructed, reconstructed, or modified) will 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; assume 1 hour is the average amount of time spent per plan.

^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.