# SUPPORTING STATEMENT ENVIRONMENTAL PROTECTION AGENCY

NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subparts GGG and GGGa) (Renewal)

#### 1. Identification of the Information Collection

#### 1(a) Title of the Information Collection

NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subparts GGG and GGGa) (Renewal), EPA ICR Number 0983.15, OMB Control Number 2060-0067.

#### 1(b) Short Characterization/Abstract

The NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGG) were proposed on January 4, 1983, promulgated on May 30, 1984, and amended on June 2, 2008. These standards apply to the following facilities in petroleum refineries: compressors and the group of all equipment (e.g., valves, pumps, flanges, etc.) within a process unit in VOC service, commencing construction, modification or reconstruction after the date of proposal. The NSPS (40 CFR Part 60, Subpart GGGa) incorporates new standards and compliance requirements for sources that commence construction, reconstruction, or modification after November 7, 2006. This information is being collected to assure compliance with 40 CFR Part 60, Subparts GGG and GGGa.

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

The "Affected Public" applies to owners and operators of petroleum refineries. The "burden" to the Affected Public may be found below in both Table 1a: Annual Respondent Burden and Cost – NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGG) (Renewal) and Table 1b: Annual Respondent Burden and Cost – NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGGa) (Renewal). The "burden" to the Federal Government is attributed entirely to work performed by Federal employees and/or government contractors. The burden to the Federal Government may be found below in both Table 2a: Average Annual EPA Burden and Cost – NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGG) (Renewal) and Table 2b: Average

Annual EPA Burden and Cost – NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGGa) (Renewal). All petroleum refineries subject to these standards are privately-owned, for-profit businesses. None of the facilities in the United States are owned by either state, local, tribal or the Federal government.

Over the next three years, approximately 116 respondents per year will be subject to Subpart GGG. In addition, it is assumed that 46 of these 116 refineries are also subject to Subpart GGGa. No additional respondents per year will become subject to these same standards. The Agency developed these estimates based on review of ICR data and consultation with internal subject matter experts.

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)(l).

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, VOC emissions from equipment leaks in 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, Subparts GGG and GGGa.

# 2(b) Practical Utility/Users of the Data

The recordkeeping and reporting requirements in the 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 these emission standards. Continuous emission monitors are used to ensure compliance with these same 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 either the Agency or its delegated authority when a source becomes subject to the requirements of these regulations. The reviewing authority may then inspect the source to check if the pollution control devices are properly installed and operated and 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, Subparts GGG and GGGa.

# 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 <u>Federal Register</u> (81 <u>FR</u> 26546) on May 3, 2016. No comments were received on the burden published in the <u>Federal Register</u>.

# **3(c) Consultations**

The Agency has consulted industry experts and internal data sources to project the number of 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. Over the next three years, we estimate that 116 refineries will have at least one process unit subject to Subpart GGG. In addition, 46 of these same 116 refineries will have at least one process unit subject to Subpart GGGa.

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 Fuel and Petrochemical Manufacturers, at (202) 457-0480, and the American Petroleum Institute, at (202) 682-8000. API provided comments on the burden related to semiannual work practice reports and records of operating parameters. The most-recently approved ICR underestimated the number of monitors that need to be calibrated as well as the effort required to develop semiannual reports

It is our policy to respond after a thorough review of comments received since the last ICR renewal, as well as those submitted in response to the first <u>Federal Register</u> notice.

# **3(d)** Effects of Less-Frequent Collection

Less-frequent information collection would decrease the margin of assurance that facilities are continuing to meet these 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 same 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 <u>FR</u> 36902, September 1, 1976; amended by 43 <u>FR</u> 40000, September 8, 1978; 43 <u>FR</u> 42251, September 20, 1978; 44 <u>FR</u> 17674, March 23, 1979).

# **3(g) Sensitive Questions**

The reporting or recordkeeping requirements in the standard 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. The United States Standard Industrial Classification (SIC) code for the respondents affected by the 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 is recorded or reported is required by the NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subparts GGG and GGGa). NSPS Subpart GGG references the compliance requirements of NSPS Subpart VV, and NSPS Subpart GGGa references the compliance requirements of NSPS Subpart VVa.

A source must make the following reports:

Notifications	
Construction/reconstruction	60.7(a)(1)
Anticipated startup	60.7(a)(2)
Actual startup	60.7(a)(3)
Physical or operational change	60.7(a)(4)
Initial performance test	60.8(d)
Alternative standard selected	60.487(d)

Reports	
Initial performance test results	60.8(a)

Reports	
Comply with the provisions of 60.487	60.592(e)
Semiannual reports (Subpart GGG)	60.487(a) through (c)
Semiannual reports (Subpart GGGa)	60.487a(a) through (c)
Performance test	60.8, 60.487(e)

A source must keep the following records:

Recordkeeping	
40 CFR Part 60, Subpart GGG	
All measurements, monitoring device, and performance testing	60.7(f)
measurements	
Comply with the provisions of 60.486	60.592(e)
The date and instrument reading of each monitored component must be recorded	N/A
The following information for each detected leak shall be	60.486(c)
recorded in a log and kept for 2 years: instrument and operator	
ID numbers and the equipment ID number, repair methods used	
to stop the leaks, and the dates of repair	
Information pertaining to design requirements or closed vent	60.486(d)
systems and control devices	
Equipment identification numbers and designations, and dates of	60.486(e)
performance tests	
Dates and results of weekly visual inspections	N/A
Information related to instrument calibrations and drift checks	N/A
Information pertaining to valves and pumps that are designated as unsafe to monitor or difficult to monitor	60.486(f)
Information pertaining to valves complying with alternative compliance requirements	60.486(g)
Design criteria and any changes	60.486(h)
Records for use in determining exemptions	60.486(i)
Information and data to demonstrate that a piece of equipment is	60.486(j)
not in VOC service	33.133(j)
40 CFR Part 60, Subpart GGGa	
All measurements, monitoring device, and performance testing	60.7(f)
measurements	
Comply with the provisions of 60.486a	60.592a(e)
The date and instrument reading of each monitored component	60.486a(a)(3)
must be recorded	

# Recordkeeping

40 CFR Part 60, Subpart GGG

60.486a(c)		
60.486a(d)		
60.486a(e)(1) through (5)		
60.486a(e)(7)		
60.486a(e)(8)		
60.486a(f)		
60.486a(g)		
60.486a(h)		
60.486a(i)		
60.486a(j)		

# **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, or for pressure drop and liquid supply pressure for control device. Perform initial performance test as per 40 CFR 60.485, Reference Method 21 and 22 tests, and repeat performance tests if necessary. Write the notifications and reports listed above.

Enter information required to be recorded above.

# **Respondent Activities**

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 the purpose of processing and maintaining information.

Develop, acquire, install, and utilize technology and systems for the purpose of 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

Review notifications and reports, including performance test reports, and excess emissions reports, required to be submitted by industry.

Audit facility records.

Input, analyze, and maintain data in the Enforcement and Compliance History Online (ECHO) and 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

A majority of the respondents are large entities (i.e., large businesses). We estimate approximately 12 sources¹ within the respondent universe are small entities. However, the impact on small entities (i.e., small businesses) was taken into consideration during the development of the regulation. 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.

For sources that install "leakless" components, monitoring may not be required for those components. Monitoring and recordkeeping may be reduced for sources that maintain low percentages of leaking components. In addition, alternative means of emission limitation are allowed after proper demonstration of their effectiveness to the Administrator.

#### 5(d) Collection Schedule

The specific frequency for each information collection activity within this request is shown below in both Table 1a: Annual Respondent Burden and Cost – NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGG) (Renewal) and Table 1b: Annual Respondent Burden and Cost – NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGGa) (Renewal).

# 6. Estimating the Burden and Cost of the Collection

Tables 1a and 1b document the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry for each of the subparts 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

<sup>1</sup> We estimate 25 percent of process units subject to Subpart GGGa are located at small refineries ( $46 \times 0.25 = 11.5$ , rounded to 12).

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 recordkeeping and reporting requirements is estimated to be 130,000 hours for Subpart GGG (Total Labor Hours from Table 1a below) and 53,400 hours for Subpart GGGa (Total Labor Hours from Table 1b). 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 \$138.43 (\$65.92+ 110%)
Technical \$106.45 (\$50.69 + 110%)
Clerical \$52.77 (\$25.13 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2015, "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 only costs to the regulated industry resulting from information collection activities required by these subject standards are labor costs. To the extent possible, the requirements of these same standard are consistent with industry practices. VOC monitors used for leak detection are typically used in the industry for safety reasons and do not impose an additional cost to the respondents. Consequently, there are no capital/startup or operation and maintenance costs.

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

The only type of industry costs associated with the information collection activity in the regulations are labor costs. There are no capital/startup or operation and maintenance 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 activities such 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 \$49,600 for Subpart GGG and \$19,100 for Subpart GGGa.

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

Managerial	\$64.16 (GS-13, Step 5, \$40.10 + 60%)
Technical	\$47.62 (GS-12, Step 1, \$29.76 + 60%)
Clerical	\$25.76 (GS-6, Step 3, \$16.10 + 60%)

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. Details upon which this estimate is based appear below in both Table 2a: Average Annual EPA Burden and Cost – NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGG) (Renewal) and Table 2b: Average Annual EPA Burden and Cost – NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGGa) (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 116 existing respondents per year will be subject to Subpart GGG. In addition, it is assumed that 46 of these same 116 refineries are also subject to Subpart GGGa. It is estimated that no additional respondents will become subject to either Subpart over the next three years. The overall average number of respondents, as shown in the table below, is 116 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 S							
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	116	0	0	116			
2	0	116	0	0	116			
3	0	116	0	0	116			

Number of Respondents						
Average	0	116	0	0	116	

<sup>&</sup>lt;sup>1</sup> 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 116.

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=(BxC)+D		
Subpart GGG Semiannual Reports	116	2	0	232		
Subpart GGGa Semiannual Reports	46	2	0	92		
			Total	324		

The number of Total Annual Responses is 324.

The total annual labor costs are \$13,400,000 for Subpart GGG and \$5,540,000 for Subpart GGGa. Details regarding these estimates may be found below in both Table 1a: Annual Respondent Burden and Cost – NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGG) (Renewal) and Table 1b: Annual Respondent Burden and Cost - NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGGa) (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 1a, 1b, 2a, and 2b, respectively, and summarized below.

# (i) Respondent Tally

The total annual labor hours for this ICR are 183,000 for Subpart GGG and Subpart GGGa combined. Details regarding these estimates may be found below in both Table 1a: Annual Respondent Burden and Cost – Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGG) (Renewal) and Table 1b: Annual Respondent Burden and Costs – Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGGa) (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 566 hours per response.

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

# **Summary of Respondent Burden**

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

<sup>&</sup>lt;sup>a</sup> Totals are rounded to three significant figures. Figures may not add exactly due to rounding.

# (ii) The Agency Tally

The average annual Agency burden and cost over next three years is estimated to be 1,490 labor hours (rounded) at a cost of \$68,700. See below in both Table 2a: Average Annual EPA Burden and Cost – Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGG) (Renewal) and Table 2b: Average Annual EPA Burden and Cost – Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGGa) (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.

# **Summary of Agency Burden**

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

<sup>&</sup>lt;sup>a</sup> Totals are rounded to three significant figures. Figures may not add exactly due to rounding.

# 6(f) Reasons for Change in Burden

The increase in burden from the most recently approved ICR is due to adjustments in Agency's estimates. For both Subpart GGG and Subpart GGGa, the burden has increased due to more accurate estimates for recording operation parameters and semiannual work practice reports. The most-recently approved ICR underestimated the effort required to record operating parameters and develop semiannual reports. Updated estimates for these burden items increased the total respondent burden for Subpart GGG from 18,800 to 130,000 hours and for Subpart GGGa from 6,120 to 53,400 hours. This ICR takes into account estimates provided by consultations with industry trade associations. These changes result in an overall increase in respondent and agency burden for both subparts.

# 6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 566 hours per response. "Burden" means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information 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-2013-0303. An electronic version of the public docket is available at <a href="http://www.regulations.gov/">http://www.regulations.gov/</a>, 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-2013-0303 and OMB Control Number 2060-0067 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 1a: Annual Respondent Burden and Cost – NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGG) (Renewal)

Burden Item	(A) Responden t Hours per Occurrence	(B) Number of Occurrences per Respondent per Year	(C) Hours per Respondent per Year (A x B)	(D) Number of Respondents per Year <sup>a</sup>	(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)	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	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
Subtotal for Reporting Requirements						2,268		8,137
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
Subtotal for Recordkeeping Requirements						121,728		\$12,558,944
TOTAL ANNUAL BURDEN AND COST (Rounded) h						130,000		\$13,400,000
Capital and O&M Costs (See Section 6(b)(iii))								\$0
TOTAL COST (Rounded) h						130,000		\$13,400,000

Table 1b: Annual Respondent Burden and Cost – NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGGa) (Renewal)

<sup>&</sup>lt;sup>a</sup> Only includes facilities that commenced construction, reconstruction, or modification prior to November 7, 2006. All new facilities and facilities that commence construction, reconstruction, or modification after November 7, 2006 are subject to Subpart GGGa.

<sup>&</sup>lt;sup>b</sup> This ICR uses the following labor rates: \$106.45 (technical), \$138.43 (managerial), and \$52.77 (clerical). These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2015, "Table 2. Civilian Workers, by occupational and industry group." The rates are from column 1, "Total compensation." They have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

<sup>&</sup>lt;sup>c</sup> Assume 20 percent of initial performance tests must repeat due to failure.

<sup>&</sup>lt;sup>d</sup> Owners or operators of the affected facilities must make one-time-only notifications

<sup>&</sup>lt;sup>e</sup>The time to prepare reports is estimated to be the same under both Subparts because the information in the new records must be maintained on-site, but it does not have to be reported.

<sup>&</sup>lt;sup>f</sup> Assume that average number of affected facilities over the next three years is equal to the current number of facilities (116) because affected facilities after November 7, 2006 will be subject to Subpart GGGa instead of Subpart GGG.

<sup>&</sup>lt;sup>g</sup> Although monitoring of the various components may be required on a weekly, monthly, quarterly, semiannual or annual basis, given the number of components that must be monitored at any facility, monitoring overall occurs daily. It is also assumed that it takes about 3 minutes per calibration and large facilities have about 25 monitors calibrated about twice per day. Therefore, it is assumed that the average recordkeeping time for each day's worth of monitoring for Subpart GGG is 2.5 hours (0.05 hours/calibration x 25 monitors x 2 calibrations/monitor/day) and that monitoring is done 365 days a year.

<sup>&</sup>lt;sup>h</sup> Totals are rounded to three significant figures. Figures may not add exactly due to rounding.

Burden Item	(A) Responden t Hours per Occurrence (Technical hours)	(B) Number of Occurrences per Respondent per Year	(C) Hours per Responden t 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) Managemen t 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>
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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	34.5	34.5	1.73	3.45	\$4,093.37
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. Gater 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>d</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 at Large Refineries <sup>e, f</sup>	30	2	60	34.5	2,070	103.5	207	\$245,602.40
vii. Semiannual Work Practice Reports at Small Refineries <sup>e, f</sup>	8	2	16	11.5	184	9.2	18.4	\$21,831.32
Subtotal for Reporting Requirements						2,420		\$271,527
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								

(Rounded) i  Capital and O&M Costs (See Section 6(b)						53,400		\$5,540,000 \$0
Subtotal for Recordkeeping Requirements TOTAL ANNUAL BURDEN AND COST						51,023		\$5,264,146
G. Audits	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
F. Train Personnel	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ii. Records of Operating Parameters at Small Refineries <sup>g, h</sup>	2.66	365	970.9	5.75	5,582.68	279.13	558.27	\$662,376.01
i. Records of Operating Parameters at Large Refineries <sup>g, h</sup>	2.64	365	963.6	40.25	38,784.90	1,939.25	3,878.49	\$4,601,770.21

Assume that large facilities need an additional 0.14 hours per day to complete the tasks required by the new standards. Therefore, it is assumed that the average recordkeeping time for each day's worth of monitoring for large facilities for Subpart GGGa is 2.64 hours and that monitoring is done 365 days a year. 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 refineries with manual recordkeeping of instrument readings. Therefore, it is assumed that the average recordkeeping time for each day's worth of monitoring for small facilities for Subpart GGGa is 2.66 hours and that monitoring is done 365 days a year.

<sup>&</sup>lt;sup>a</sup> There are approximately 46 refineries (respondents) subject to the standard.

<sup>&</sup>lt;sup>b</sup>This ICR uses the following labor rates: \$106.45 (technical), \$138.43 (managerial), and \$52.77 (clerical). These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2015, "Table 2. Civilian Workers, by occupational and industry group." The rates are from column 1, "Total compensation." They have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

<sup>&</sup>lt;sup>c</sup> Assume 20% of initial performance tests must repeat due to failure.

<sup>&</sup>lt;sup>d</sup>Owners or operators of the affected facilities must make one-time-only notifications.

<sup>&</sup>lt;sup>e</sup>The time to prepare reports is estimated to be the same under both subparts because the information in the new records must be maintained on-site, but it does not have to be reported.

<sup>&</sup>lt;sup>f</sup> Assume that 25 percent of the process units are located at small refineries ( $25\% \times 46 = 11.5$ ). The rest are large facilities ( $75\% \times 46 = 34.5$ ). Small facilities have fewer leaks and deviations so they can complete reports in less time. Larger facilities require significantly more time to complete reports.

<sup>&</sup>lt;sup>g</sup> Although monitoring of the various components may be required on a weekly, monthly, quarterly, semiannual or annual basis, given the number of components that must be monitored at any facility, monitoring overall occurs daily.

<sup>&</sup>lt;sup>h</sup> Assume that 25 percent of the process units are located at small refineries and half of those use manual recordkeeping of instrument readings ( $46 \times 25\% \times 0.5 = 5.75$ ) and that 75 percent of the process units are located at large refineries ( $46 \times 75\% = 34.5$ ) and thus the number of process units that do not need additional time for manual recordkeeping is (5.75 + 34.5 = 40.25)

<sup>&</sup>lt;sup>1</sup> Totals are rounded to three significant figures. Figures may not add exactly due to rounding.

Table 2a: Average Annual EPA Burden and Cost – NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGG) (Renewal)

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) Managemen t Hours per Year (E x 0.05)	(G) Clerical Hours per Year (E x 0.1)	(H) Annual Cost <sup>b</sup>
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
TOTAL ANNUAL BURDEN AND COST(Rounded) <sup>c</sup>						1,070		\$49,600

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

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

Table 2b: Average Annual EPA Burden and Cost – NSPS for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGGa) (Renewal)

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) Managemen t Hours per Year (E x 0.05)	(G) Clerical Hours per Year (E x 0.1)	(H) Annual Cost <sup>b</sup>
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	0.50	1	0.5	0	0	0	0	\$0
Notification of Actual Startup	0.50	1	0.5	0	0	0	0	\$0
Notification of Initial Test	0.50	1.2	0.6	0	0	0	0	\$0
Review Test Results	8.00	1.2	9.6	0	0	0	0	\$0
Report Review (Existing Plants)	4	2	8	46	368	18.4	36.8	\$19,071.42
TOTAL ANNUAL BURDEN AND COST(Rounded) °						423		\$19,100

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

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