**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 0983.17, OMB Control Number 2060-0067.

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

The New Source Performance Standards (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 November 16, 2007 (as an addendum to the regulations published at 40 CFR Part 60, Subpart GGGa). The standards at Subpart GGG apply to compressors, valves, pumps, pressure relief devices, sampling connection systems, open-ended valves or lines, and flanges or other connectors in VOC service at petroleum refineries that commenced construction, reconstruction, or modification after January 4, 1983, and on or before November 7, 2006. The standards at Subpart GGGa apply to compressors, valves, pumps, pressure relief devices, sampling connection systems, open-ended valves or lines, and flanges or other connectors in VOC service at petroleum refineries that commence either construction, or 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 of these measurements and retain the file for at least two years following the date of such measurements, maintenance reports, and records. All reports required to be submitted electronically are submitted through the EPA's Central Data Exchange (CDX), using the Compliance and Emissions Data Reporting Interface (CEDRI), where the delegated state or local authority can review them. If there is no such delegated authority, the EPA’s regional offices can review them. All other reports are sent to either the delegated state or local authority. If there is no such delegated authority, the reports are sent directly to the EPA’s regional offices. The use of the term "Designated Administrator" throughout this document refers to the U.S. EPA or a delegated authority, such as a state agency. The term "Administrator" alone refers to the U.S. EPA Administrator.

The “Affected Public” are owners and operators of petroleum refineries. The “burden” to the Affected Public may be found at the end of this document 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 at the end of this document 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). There are approximately 116 petroleum refineries, which are owned and operated by the petroleum refining industry. None of the 116 facilities in the United States are owned by either state, or local, or tribal entities or by the Federal government. They are all owned and operated by privately-owned, for-profit businesses. We assume that they will all respond to EPA inquiries.

Based on our consultations with industry representatives, there are an average of one affected facilities at each plant site and each plant site has only one respondent (i.e., the owner/operator of the plant site).

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 Office of Management and Budget (OMB) approved the currently active ICR with the following “Terms of Clearance”:

“Upon renewal of this collection, OMB requests that EPA submit the following as supplemental documents: the regulatory text that includes the ICR and the regulatory text that includes the ICR submission instructions. Please also update to the standard 18 question SS-A format upon renewal.”

At the time of this renewal, the standard 18-question format template is not yet available. The Agency will update this ICR to the standard 18-question format once the template is available and upon the next renewal cycle. Respondents subject to this subpart submit semiannual reports and maintain records. The relevant regulatory text for these activities is referenced in section 4(b) of this document. We have created a supplementary document including the regulatory text that describes the ICR requirements as identified in section 4(b)(i) of this document as requested.

**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 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 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, leaks are being detected and repaired, and the 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**

For reports required to be submitted electronically, the information is sent through the EPA's CDX, using CEDRI, where the appropriate EPA regional office can review it, as well as for state and local agencies that have been delegated authority. If a state or local agency has adopted under its own authority its own standards for reporting or data collection, adherence to those non-Federal requirements does not constitute duplication.

For all other reports, 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 either the delegated state or local agency. If a state or local agency has adopted its own 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* (87 FR 43843) on July 22, 2022. 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 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. Approximately 116 respondents will be subject to these same standards over the three-year period covered by this ICR.

Industry trade association(s) and other interested parties were provided an opportunity to comment on the burden associated with these standards as it was being developed and these same standards has been reviewed previously to determine the minimum information needed for compliance purposes. In developing this ICR, we contacted both the American Fuel & Petrochemical Manufacturers, at (202) 457-0480, and the American Petroleum Institute, at (202) 682-8000.

It is our policy to respond after a thorough review of comments received since the last ICR renewal, as well as for those submitted in response to the first *Federal Register* notice. In this case, no comments were received.

**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 that 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; and 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. 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 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** | |
| --- | --- |
| Notification of construction/reconstruction | §60.7(a)(1) |
| Notification of anticipated startup | §60.7(a)(2) |
| Notification of actual startup | §60.7(a)(3) |
| Notification of physical or operational change | §60.7(a)(4) |
| Initial performance test | §60.8(d) |
| Notification of alternative standard selected | §60.487(d) |

| **Reports** | |
| --- | --- |
| Initial performance test results | §60.8(a) |
| Comply with the provisions of §60.487 | §60.592(e) |
| Comply with the provisions of §60.487a | §60.592a(e) |
| Semiannual reports (Subpart GGG) | §§60.487(a) - (c) |
| Semiannual reports (Subpart GGGa) | §§60.487a(a) - (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 measurements | §60.7(f) |
| Comply with the provisions of §60.486 | §60.592(e) |
| The following information for each detected leak shall be 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 | §60.486(c) |
| Information pertaining to design requirements or closed vent systems and control devices | §60.486(d) |
| Equipment identification numbers and designations, and dates of performance tests | §60.486(e) |
| 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 not in VOC service | §60.486(j) |

| **Recordkeeping** | |
| --- | --- |
| **40 CFR Part 60, Subpart GGGa** | |
| All measurements, monitoring device, and performance testing measurements | §60.7(f) |
| Comply with the provisions of §60.486a | §60.592a(e) |
| The date and instrument reading of each monitored component must be recorded | §60.486a(a)(3) |
| Each detected leak shall be recorded in a log and kept for 2 years | §60.486a(c) |
| Information pertaining to design requirements or closed vent systems and control devices | §60.486a(d) |
| Equipment identification numbers and designations, and dates of compliance tests | §§60.486a(e) (1) - (5) |
| Dates and results of weekly visual inspections | §60.486a(e)(7) |
| Information related to instrument calibrations and drift checks | §60.486a(e)(8) |
| Information pertaining to valves and pumps that are designated as unsafe to monitor or difficult to monitor | §60.486a(f) |
| Information pertaining to valves complying with alternative compliance requirements | §60.486a(g) |
| Design criteria and any changes | §60.486a(h) |
| Records for use in determining exemptions | §60.486a(i) |
| Information and data to demonstrate that a piece of equipment is not in VOC service | §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 the leak detection equipment for your monitoring program. |
| Perform initial performance test, Reference Method 2, 2A, 2C, or 2D, 18, 21, 22, ASTM E260-73, 91, or 96, E168-67, 77, or 92, or E169-63, 77, 93, D86-78, 82, 90, 93, 95, or 96 tests, and 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 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**

The 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 these emission standards and note the operating conditions under which compliance was achieved. 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. The EPA uses ICIS for tracking air pollution compliance and enforcement by local and state regulatory agencies, EPA’s regional offices, and EPA headquarters. Both the 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). We estimate approximately 12 sources[[1]](#footnote-3) 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 at the end of this document 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**

Table 1 documents 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 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 53,700 hours for Subpart GGGa (Total Labor Hours from Table 1b, below). These hours are based on Agency studies and background documents from the development of the regulations, 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 $157.61 ($75.05 + 110%)

Technical $123.94 ($59.02 + 110%)

Clerical $62.52 ($29.77 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2021, “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 varying industry wage rates and the additional overhead business costs of employing workers beyond their wages and benefits, including business expenses associated with hiring, training, and equipping their employees.

**(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 standards 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 and/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. The 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 both the publication and distribution of collected information.

The average annual Agency cost during the three years of the ICR is estimated to be $54,500 for Subpart GGG and $21,600 for Subpart GGGa.

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

Managerial $70.56 (GS-13, Step 5, $44.10 + 60%)

Technical $52.37 (GS-12, Step 1, $32.73 + 60%)

Clerical $28.34 (GS-6, Step 3, $17.71 + 60%)

These rates are from the Office of Personnel Management (OPM), 2022 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 at the end of this document 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 Submit Reports | | Respondents That Do Not Submit Any Reports |  | |
| Year | (A)  Number of New Respondents a | (B)  Number of Existing Respondents b | (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 |
| Average | 0 | 116 | 0 | 0 | 116 |

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

b 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.

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 a | (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** | | | | |
| Notification of construction/reconstruction | 0 | 1 | 0 | 0 |
| Notification of anticipated startup | 0 | 1 | 0 | 0 |
| Notification of actual startup | 0 | 1 | 0 | 0 |
| Notification of performance test | 0 | 1 | 0 | 0 |
| Performance test report | 0 | 1 | 0 | 0 |
| Semiannual report | 116 | 2 | 0 | 232 |
| **Subpart GGGa** | | | | |
| Notification of construction/reconstruction | 0 | 1 | 0 | 0 |
| Notification of anticipated startup | 0 | 1 | 0 | 0 |
| Notification of actual startup | 0 | 1 | 0 | 0 |
| Notification of performance test | 0 | 1 | 0 | 0 |
| Performance test report | 0 | 1 | 0 | 0 |
| Semiannual report | 46 | 2 | 0 | 92 |
|  |  |  | **Total** | **324** |

a We assume that 116 existing refineries per year will be subject to requirements of NSPS Subpart GGG during the three-year period of this ICR. This rule applies to facilities that commenced construction, reconstruction, or modification prior to November 7, 2006. We assume that an average of 46 refineries per year will be subject to the requirements of NSPS Subpart GGGa and that no new refineries will become subject to the rule during the three-year period of this ICR. All facilities that commence construction, reconstruction, or modification after November 7, 2006 are subject to Subpart GGGa.

The number of Total Annual Responses is 324.

The total annual labor costs are $15,600,000 for Subpart GGG and $6,440,000 for Subpart GGGa. Details regarding these estimates may be found at the end of this document 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 both the respondents and the Agency are shown in Tables 1a, 1b, 2a, and 2b at the end of this document, respectively, and summarized below.

**(i) Respondent Tally**

The total annual labor hours for this ICR are 184,000 for Subpart GGG and Subpart GGGa combined. Details regarding these estimates may be found at the end of this document 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 567 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are $0. 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 a**  **(hr)** | **Total Cost a**  **($)** |
| Subpart GGG | 8,137 | 121,728 | 130,000 | $15,600,000 |
| Subpart GGGa | 2,645 | 51,023 | 53,700 | $6,440,000 |
| **Total a** |  |  | **184,000** | **$22,000,000** |
| a 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 $76,100; see below 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 | $54,500 |
| Subpart GGGa | 423 | $21,600 |
| **Total a** | **1,490** | **$76,100** |
| a Totals are rounded to three significant figures. Figures may not add exactly due to rounding. | | |

**6(f) Reasons for Change in Burden**

There is no change in burden from the most-recently approved ICR as currently identified in the OMB Inventory of Approved Burdens. This is due to two considerations: 1) the regulations have not changed over the past three years and are not anticipated to change over the next three years; and 2) the growth rate for this industry is very low or non-existent, so there is no significant change in the overall burden. Since there are no changes in the regulatory requirements and there is no significant industry growth, there are also no changes in the capital/startup and/or operation and maintenance (O&M) costs. There is a slight increase in costs, which is wholly due to the use of updated labor rates. This ICR uses labor rates from the most-recent Bureau of Labor Statistics report (September 2021) to calculate respondent burden costs.

**6(g) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 567 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-OAR-2022-0055. 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. Due to COVID-19 precautions, entry to the Reading Room is available by appointment only. Please contact personnel in the Reading Room to schedule an appointment. 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-OAR-2022-0055 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) Respondent Hours per Occurrence (Technical hours)** | **(B) Number of Occurrences per Respondent per Year** | **(C) Hours per Respondent per Year (C=A x B)** | **(D) Number of Respondents per Year a** | **(E) Technical Hours per Year (E=C x D)** | **(F) Management Hours per Year (F= E x 0.05)** | **(G) Clerical Hours per Year (G= E x 0.1)** | **Total Labor Costs per Year b** |
| 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 | $16,016.41 |
| B. Required Activities |  |  |  |  |  |  |  |  |
| i. Initial performance tests | 24 | 1 | 24 | 0 | 0 | 0 | 0 | $0 |
| ii. Repeat performance testsc | 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 d | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0 |
| ii. Notification of Anticipated Startup d | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0 |
| iii. Notification of Actual Startup e | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0 |
| iv. Notification of Initial Performance Test d | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0 |
| v. Report of Performance Test | See 3B |  |  |  |  |  |  |  |
| vi. Semiannual Work Practice Reports e, f | 30 | 2 | 60 | 116 | 6,960 | 348 | 696 | $960,984.60 |
| ***Subtotal for Reporting Requirements*** |  |  |  |  | ***8,137*** | | | ***$977,001*** |
| 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 f, g | 2.5 | 365 | 912.5 | 116 | 105,850 | 5,292.5 | 10,585 | $14,614,974.13 |
| F. Train Personnel | 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** | | | **$14,614,974** |
| **Total Labor Burden and Costs (rounded) h** |  |  |  |  | **130,000** | | | **$15,600,000** |
| **Total Capital and O&M Costs (rounded) h** |  |  |  |  |  |  |  | **$0** |
| **Grand Total (rounded) h** |  |  |  |  | **130,000** | | | **$15,600,000** |
|  | | | | | | | | |
| **Assumptions** |  |  |  |  |  |  |  |  |
| a We assume that 116 existing refineries per year will be subject to requirements of NSPS Subpart GGG during the three-year period of this ICR. This rule applies to facilities that commenced construction, reconstruction, or modification prior to November 7, 2006. All facilities that commence construction, reconstruction, or modification after November 7, 2006 are subject to Subpart GGGa. | | | | | | | | |
| b This ICR uses the following labor rates: $157.61 ($75.05 + 110%) for managerial, $123.94 ($59.02 + 110%) for technical, and $62.52 ($29.77 + 110%) for clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2021, “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 varying industry wage rates and the additional overhead business costs of employing workers beyond their wages and benefits, including business expenses associated with hiring, training, and equipping their employees. | | | | | | | | |
| c Assume 20 percent of initial performance tests must repeat due to failure. | | | | | | | | |
| d Owners or operators of the affected facilities must make one-time-only notifications. | | | | | | | | |
| e 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. | | | | | | | | |
| f 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. | | | | | | | | |
| g 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. | | | | | | | | |
| h Totals are rounded to three significant figures. Figures may not add exactly due to rounding. | | | | | | | | |

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

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Burden Item** | **(A) Respondent Hours per Occurrence (Technical hours)** | **(B) Number of Occurrences per Respondent per Year** | **(C) Hours per Respondent per Year (C=A x B)** | **(D) Number of Respondents per Year a** | **(E) Technical Hours per Year (E=C x D)** | **(F) Management Hours per Year (F= E x 0.05)** | **(G) Clerical Hours per Year (G= E x 0.1)** | **Total Labor Costs per Year b** |
| 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 | 46 | 46 | 2.3 | 4.6 | $6,351.34 |
| B. Required Activities |  |  |  |  |  |  |  |  |
| i. Initial Performance Tests | 24 | 1 | 24 | 0 | 0 | 0 | 0 | $0 |
| ii. Repeat performance tests c | 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 d | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0 |
| ii. Notification of Anticipated Startup d | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0 |
| iii. Notification of Actual Startup d | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0 |
| iv. Notification of Initial Performance Test d | 2 | 1 | 2 | 0 | 0 | 0 | 0 | $0 |
| v. Report of Performance Test | See 3B |  |  |  |  |  |  |  |
| vi. Semiannual Work Practice Reports at Large Refineries e, f | 30 | 2 | 60 | 34.5 | 2,070 | 104 | 207 | $285,810.08 |
| vii. Semiannual Work Practice Reports at Small Refineries e, f | 8 | 2 | 16 | 11.5 | 184 | 9.2 | 18 | $25,405.34 |
| ***Subtotal for Reporting Requirements*** |  |  |  |  | **2,645** | | | **$317,567** |
| 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 at Large Refineries g, h | 2.64 | 365 | 964 | 40.25 | 38,785 | 1,939 | 3,878 | $5,355,128.11 |
| ii. Records of Operating Parameters at Small Refineries g, h | 2.66 | 365 | 971 | 5.75 | 5,583 | 279 | 558 | $770,813.89 |
| F. Train Personnel | 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*** |  |  |  |  | **51,023** | | | **$6,125,942** |
| **Total Labor Burden and Costs (rounded) i** |  |  |  |  | **53,700** | | | **$6,440,000** |
| **Total Capital and O&M Costs (rounded) i** |  |  |  |  |  |  |  | **$0** |
| **Grand Total (rounded) i** |  |  |  |  | **53,700** | | | **$6,440,000** |
|  |  |  |  |  |  |  |  |  |
| **Assumptions** |  |  |  |  |  |  |  |  |
| a We assume that an average of 46 refineries per year will be subject to the requirements of NSPS Subpart GGGa and that no new refineries will become subject to the rule during the three-year period of this ICR. All facilities that commence construction, reconstruction, or modification after November 7, 2006 are subject to Subpart GGGa. | | | | | | | | |
| b This ICR uses the following labor rates: $157.61 ($75.05 + 110%) for managerial, $123.94 ($59.02 + 110%) for technical, and $62.52 ($29.77 + 110%) for clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2021, “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 varying industry wage rates and the additional overhead business costs of employing workers beyond their wages and benefits, including business expenses associated with hiring, training, and equipping their employees. | | | | | | | | |
| c Assume 20% of initial performance tests must repeat due to failure. | | | | | | | | |
| d Owners or operators of the affected facilities must make one-time-only notifications. | | | | | | | | |
| e 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. | | | | | | | | |
| f Assume that 25 percent of the process units are located at small refineries (25% x 46 = 11.5). The rest are large facilities (75% x 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. | | | | | | | | |
| g 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.   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. | | | | | | | | |
| h Assume that 25 percent of the process units are located at small refineries and half of those use manual recordkeeping of instrument readings (46 x 25% x 0.5 = 5.75) and that 75 percent of the process units are located at large refineries (46 x 75% = 34.5) and thus the number of process units that do not need additional time for manual recordkeeping is (5.75 + 34.5 = 40.25) | | | | | | | | |
| i Totals are rounded to three significant figures. Figures may not add exactly due to rounding. | | | | | | | | |

**Table 2a: Annual Agency 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 a** | **(E) Technical Hours per Year (C x D)** | **(F) Management Hours per Year (E x 0.05)** | **(G) Clerical Hours per Year (E x 0.1)** | **(H)  Annual Cost b** |
| Performance Test Report Review (New Plants) | 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 | $54,503.30 |
| **TOTAL (rounded) c** |  |  |  |  | **1,070** | | | **$54,500** |
|  |  |  |  |  |  |  |  |  |
| **Assumptions** |  |  |  |  |  |  |  |  |
| a We assume that 116 existing refineries per year will be subject to requirements of NSPS Subpart GGG during the three-year period of this ICR. This rule applies to facilities that commenced construction, reconstruction, or modification prior to November 7, 2006. All facilities that commence construction, reconstruction, or modification after November 7, 2006 are subject to Subpart GGGa. | | | | | | | | |
| b This ICR uses the following labor rates: $70.56 (GS-13, Step 5, $44.10 + 60%) for managerial, $52.37 (GS-12, Step 1, $32.73 + 60%) for technical, and $28.34 (GS-6, Step 3, $17.71 + 60%) for clerical labor. These rates are from the Office of Personnel Management (OPM), 2022 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. | | | | | | | | |
| c Totals are rounded to three significant figures. Figures may not add exactly due to rounding. | | | | | | | | |

**Table 2b: Annual Agency Burden and Cost - NSPS for Equipment Leaks of VOC 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 a** | **(E) Technical Hours per Year (C x D)** | **(F) Management Hours per Year (E x 0.05)** | **(G) Clerical Hours per Year (E x 0.1)** | **(H)  Annual Cost b** |
| Performance Test Report Review (New Plants) | 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 | $21,613.38 |
| **TOTAL (rounded) c** |  |  |  |  | **423** | | | **$21,600** |
|  |  |  |  |  |  |  |  |  |
| **Assumptions** |  |  |  |  |  |  |  |  |
| a We assume that an average of 46 refineries per year will be subject to the requirements of NSPS Subpart GGGa and that no new refineries will become subject to the rule during the three-year period of this ICR. All facilities that commence construction, reconstruction, or modification after November 7, 2006 are subject to Subpart GGGa. | | | | | | | | |
| b This ICR uses the following labor rates: $70.56 (GS-13, Step 5, $44.10 + 60%) for managerial, $52.37 (GS-12, Step 1, $32.73 + 60%) for technical, and $28.34 (GS-6, Step 3, $17.71 + 60%) for clerical labor. These rates are from the Office of Personnel Management (OPM), 2022 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. | | | | | | | | |
| c Totals are rounded to three significant figures. Figures may not add exactly due to rounding. | | | | | | | | |

1. We estimate 25 percent of process units subject to Subpart GGGa are located at small refineries (46 x 0.25 = 11.5, rounded to 12). [↑](#footnote-ref-3)