

SUPPORTING STATEMENT

NSPS FOREQUIPMENT LEAKS OF VOC IN PETROLEUM REFINERIES (40 CFR PART 60, SUBPARTS GGG and GGGa)

Part A of the Supporting Statement

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) (Final Rule), ICR 0983.10, OMB Control Number 2060-0067.

1(b) Short Characterization/Abstract

This information collection request (ICR) is for the New Source Performance Standards (NSPS) for Equipment Leaks of VOC (Volatile Organic Compounds) in Petroleum Refineries in 40 CFR part 60, subparts GGG and GGGa. The NSPS in subpart GGG were proposed on January 4, 1983 and promulgated on May 30, 1984. 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. Amendments to subpart GGG were proposed on November 7, 2006 that would have added new standards and compliance requirements. In response to public comments, all new requirements are being incorporated in a new subpart GGGa that applies to sources that commence construction, reconstruction, or modification after November 7, 2006. The final amendments to subpart GGG involve only clarifications and additional compliance options. The burden estimates presented in this ICR reflect the reporting and recordkeeping requirements in both subparts for the 3 years after November 7, 2006.

Owners or operators of the affected facilities described must make one-time-only notifications. Owners or operators 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. Monitoring requirements specific to Equipment Leaks of VOC in Petroleum Refineries provide information on which components are leaking VOCs. NSPS Subpart GGG references the compliance requirements of NSPS Subpart VV, and NSPS Subpart GGGa references the compliance requirements of NSPS Subpart VVa. Owners or operators are required to periodically (time period varies depending on equipment type and leak history) record information identifying leaking equipment, repair methods used to stop the leaks, and dates of repair. Semiannual reports are required to measure compliance with the standards of NSPS Subparts VV and VVa as referenced by NSPS Subparts GGG and GGGa. These notifications, reports, and records are essential in determining compliance and are required, in general, of all sources subject to NSPS. Any owner or 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.

The Environmental Protection Agency's (EPA's) databases show that approximately 45 sources are currently subject to Subpart GGG. This number is not expected to change in the 3 years after November 7, 2006. In addition, although it is expected that no new refineries will be built in this 3-year period, it is estimated that an additional 10 refineries per year will become subject to Subpart GGGa as refineries construct new process units or either reconstruct or modify existing process units. For Subpart GGG, the labor hours are 6,495 per year and the annual cost of the ICR will be \$508,970. For Subpart GGGa, the labor hours are 4,216 per year and the annual cost of the ICR will be \$330,353. 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 EPA Regional Office.

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, 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 nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated [Section 111(a)(1)].

The Agency refers to this charge as selecting the best demonstrated technology (BDT). Section 111 also requires that the Administrator review and, if appropriate, revise such standards every four years. In addition, Section 114(a) States that the Administrator may require any owner or 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 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 of VOC in Petroleum Refineries cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, 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 control of emissions of VOC from equipment leaks in petroleum refineries requires not only the installation of properly designed equipment, but also the operation and maintenance of that equipment. Emissions of VOC from equipment leaks in petroleum refineries are the result of operation of the compressors and the group of all equipment (e.g., valves, pumps, flanges, etc.) within a process unit in VOC service. These standards rely on the prevention of VOC emissions through work practices, such as proper leak detection and timely repair. The notifications required in these standards are used to inform the Agency or delegated authority when a source becomes subject to these standards. The reviewing authority may then inspect the source to check if the leaks are being detected and repaired and the standard is being met.

Performance test reports are needed, as these are the Agency's record of a source's initial capability to comply with the emission standard and serve as a record of the operating conditions under which compliance was achieved. NSPS Subpart GGG references NSPS Subpart VV for compliance, and NSPS Subpart GGGa references NSPS Subpart VVa for compliance. Monthly monitoring of compressors and equipment in VOC service under NSPS Subpart GGG shall take place as specified in NSPS Subpart VV §60.485(b). For valves, if no leaks are detected for two successive months, monitoring may be performed once per quarter (see §60.482-7(c)). If a leak is detected, the equipment shall be monitored monthly until a leak is not detected for two successive months. Also, leak location shall be recorded in a log, and this information shall be kept available for two years. Leaks shall be repaired within 15 days and the date of successful repair shall be recorded in the log. Additionally, an owner or operator may use specified equipment eliminating the need for monitoring, or seek approval of alternative emission limitations under other various sections of 40 CFR part 60, subpart VV or VVa.

Semiannual reports shall be submitted itemizing the information for each month. Notifications are used to inform the Agency or delegated authority when a source becomes subject to a standard. The reviewing authority may then inspect the source to check if the standard is being met. The semiannual reports are used for problem identification, as a check on source operations and maintenance, and for compliance determinations. The information generated by the monitoring, recordkeeping and reporting requirements described in this ICR is used by the Agency to ensure that facilities affected by the NSPS continue to identify and repair leaking equipment and achieve compliance with the regulation. Adequate monitoring, recordkeeping, and reporting are necessary to ensure compliance with these standards, as required by the Clean Air Act. The additional records required by subpart GGGa have been identified as additional information needed by Agency inspectors to ensure compliance. The information collected from recordkeeping and reporting requirements is also used for targeting inspections, and is of sufficient quality to be used as evidence in court.

3. Nonduplication, Consultations, and Other Collection Criteria

The recordkeeping and reporting requested is required under 40 CFR part 60, subpart GGG and subpart GGGa.

3(a) Nonduplication

If the subject standards have not been delegated, the information is sent 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 their 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, no duplication exists.

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

A public review and comment period followed publication of the proposed amendments in the Federal Register. Several comments were received on the proposed standards and burden estimates. In consideration of these comments, several changes in the standards and compliance requirements were made that affected the burden estimates.

3(c) Consultations

During development of the proposed amendments, EPA held meetings and conference calls in which representatives of petroleum refining companies and their trade associations (National Petroleum Refiners Association and American Petroleum Institute) were provided an opportunity to comment on the burden associated with the proposed amendments.

3(d) Effects of Less Frequent Collection

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

3(e) General Guidelines

None of the reporting or recordkeeping requirements contained in 40 CFR part 60, subpart GGG or otherwise pertinent to this request violate any of the regulations established by OMB in 5 CFR 1320.6.

3(f) Confidentiality

The required information consists of emissions data and other information that have been determined not to be private. However, 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 (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 40000, September 8, 1978; 43 FR 42251, September 20, 1978; 44 FR 17674, March 23, 1979).

3(g) Sensitive Questions

None of the reporting or recordkeeping requirements contained in 40 CFR part 60, subpart GGG or GGGa or otherwise pertinent to this request contain sensitive questions.

4. The Respondents and the Information Requested

4(a) Respondents/SIC Codes

The respondents of the recordkeeping and reporting requirements are petroleum refineries where the affected compressors or group of equipment within a process unit commenced construction, modification, or reconstruction after January 4, 1983. The SIC code for the respondents affected by the standards is SIC (U.S. Standard Industrial Classification) Code 2911, which corresponds to the NAICS (North American Industry Classification System) Code 324110 for petroleum refineries where the affected compressors or group of equipment within a process unit commenced construction, modification, or reconstruction after January 4, 1983.

4(b) Information Requested

(i) Data Items

All data in this ICR that is recorded and/or reported is required by 40 CFR part 60, subpart GGG or subpart GGGa. These requirements are summarized in the following tables.

A source must make the following notifications and reports:

Notifications for 40 CFR Part 60, Subparts GGG and GGGa	Citation for subpart GGG	Citation for subpart GGGa
Construction/reconstruction	60.7(a)(1)	60.7(a)(1)
Anticipated startup	60.7(a)(2)	60.7(a)(2)
Actual startup	60.7(a)(3)	60.7(a)(3)
Physical or operational change	60.7(a)(4)	60.7(a)(4)
Initial performance test	60.8(d)	60.8(d)
Alternative standard selected	60.487(d)	60.487a(d)

Reports for 40 CFR Part 60, Subparts GGG and GGGa	Citation for subpart GGG	Citation for subpart GGGa
Initial performance test results	60.8(a)	60.8(a)
Comply with the provisions of 60.487	60.592(e)	60.592a(e)
Semiannual reports	60.486, 60.487(a) through (c)	60.486a, 60.487a(a) through (c)
Performance test	60.8, 60.487(e)	60.8, 60.487a(e)

A source must keep the following records:

Recordkeeping for 40 CFR Part 60, Subparts GGG and GGGa	Citation for subpart GGG	Citation for subpart GGGa
All measurements, monitoring device, and performance testing measurements	60.7(e)	60.7(e)
Comply with the provisions of 60.486 or 60.486a	60.592(e)	60.592a(e)
The date and instrument reading of each monitored component must be recorded	N/A	60.486a(a)
Each detected leak shall be recorded in a log and kept for 2 years	60.486(c)	60.486a(c)
Information pertaining to design requirements or closed vent systems and control devices	60.486(d)	60.486a(d)
Equipment identification numbers and designations, and dates of performance tests	60.486(e)	60.486(e)(1) through (5)
Dates and results of weekly visual inspections	N/A	60.486a(e)(6)
Information related to instrument calibrations and drift checks	N/A	60.486a(e)(7)
Information pertaining to valves and pumps that are designated as unsafe to monitor or difficult to monitor	60.486(f)	60.486a(f)
Information pertaining to valves complying with alternative compliance requirements	60.486(g)	60.486a(g)
Design criteria and any changes	60.486(h)	60.486a(h)
Records for use in determining exemptions	60.486(i)	60.486a(i)
Information and data to demonstrate that a piece of equipment is not in VOC service	60.486(j)	60.486a(j)

Records are required to be retained for 2 years.

ii. Respondent Activities

The respondent activities required by 40 CFR part 60, subparts GGG and GGGa are identified in the following table:

Respondent Activities
Read instructions
Perform initial performance test as per 40 CFR 60.485, Reference Method 21 and 22 tests, and repeat performance tests
Write the notifications and reports listed above
Enter information required to be recorded above
Submit the required reports developing, acquiring, installing, and utilizing technology and systems for the purpose of collecting, validating, and verifying information
Develop, acquire, install, and utilize technology and systems for the purpose of processing and maintaining information
Develop, acquire, install, and utilize technology and systems for the purpose of 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
Transmit or otherwise disclose the information

As refiners replace/upgrade their monitoring equipment, they may choose to use systems that automatically log the results of monitoring, which can then be downloaded into a computer database. This database can then be used to develop the required reports.

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 information required under 40 CFR part 60, subparts GGG and GGGa:

Agency Activities
Observe initial performance tests and repeat performance tests if necessary
Review notifications and reports, including performance test reports, and other reports, required to be submitted by industry
Audit facility records
Input, analyze, and maintain data in the Air Facility System

5(b) Collection Methodology and Management

The required data and reports can be evaluated onsite by conducting a partial compliance evaluation, full compliance evaluation or inspection, or through offsite review of compliance monitoring records and reports. 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 entered into the Air Facility System (AFS), which is operated and maintained by EPA’s Office of Compliance. AFS is EPA’s database for the collection, maintenance, and retrieval of compliance data for over 125,000 industrial and government-owned facilities. EPA uses the AFS for tracking air pollution compliance and enforcement by local and State regulatory agencies, and 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 or operator for two years.

5(c) Small Entity Flexibility

A majority of the affected facilities are large businesses. However, the impact on small businesses was taken into consideration during development of the regulation. Due to technical considerations involving the process operations and leak detection and repair programs, the recordkeeping and reporting requirements are the same for both small and large businesses. The Agency considers these requirements to be the minimum needed to ensure compliance and, therefore, cannot reduce them further for small businesses. 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 therefore, recordkeeping) may also be reduced for sources that maintain low percentages of leaking components. Additionally, 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 in Table 2: Annual burden of reporting and recordkeeping requirements as a result of

NSPS Subpart GGG and in Table 4: Annual burden of reporting and recordkeeping requirements as a result of NSPS Subpart GGGa.

6. Estimating the Burden and Cost of the Collection

Tables 2 and 4 document the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry for 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 not conduct or 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

Although monitoring of the various components may be required on a weekly, monthly, quarterly, semi-annual or annual basis, given the number of components that must be monitored at any facility, monitoring overall is essentially occurring daily. Therefore, it is assumed that the average recordkeeping time for each day's worth of monitoring for both subpart GGG and subpart GGGa is 0.3 hours and that monitoring is done 365 days a year. An additional 0.10 hours per day are estimated for a typical refinery to complete the new recordkeeping tasks required by subpart GGGa. These tasks include collecting and maintaining records of all instrument readings (3 minutes per day), daily instrument calibrations and drift checks (3 minutes per day), and weekly pump inspections (15 minutes per week). Instrument readings are assumed to be collected electronically; thus, the additional time is for downloading additional data and organizing it for storage. Smaller facilities may record instrument readings manually. For a facility with a typical process, an average of 0.013 hours per day was estimated to prepare and print recordkeeping forms and to manually record the instrument readings on the forms. This includes 2 hr/yr to prepare and print recordkeeping forms and 10 seconds to record each reading for 9 pumps monitored monthly and 452 valves monitored semiannually. 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.

The average annual burden to industry over the three years from these recordkeeping and reporting requirements is estimated at 6,495 person-hours for subpart GGG and 4,216 person-hours for subpart GGGa. These hours are based on Agency studies and background documents from the development of the standards or test methods, 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 labor rates of \$80.41 per hour for technical, \$120.92 per hour for managerial and \$36.67 for clerical. These rates are from the United States Department of Commerce Bureau of Labor Statistics, "May 2006 National Industry-specific Occupational

Employment and Wage Estimates; NAICS 324000 – Petroleum and Coal Products Manufacturing.” The wage rates have been increased by 110% to account for the benefit packages available to those employed by private industry.

(ii) Estimating Capital and Operations and Maintenance Costs

The only industry costs associated with the information collection activity in the standards are labor costs. There are no capital/startup or operation and maintenance costs. The type of industry costs associated with the information collection activity in the standards are labor costs and maintenance costs for the VOC monitors. Monitoring equipment for leaks is standard in the industry for safety reasons. To the extent possible, the requirements of this standard are consistent with industry practice. Consequently, there are no capital or O&M costs associated with this standard.

(iii) Capital/Start-up vs. Operation and Maintenance (O&M) Costs

This is not applicable since this is a leak detection and repair program with no continuous monitoring equipment, as stated in the previous section.

6(c) Estimating Agency Burden and Cost

The only costs to the Agency are those costs associated with analysis of the reported information. Publication and distribution of the information are part of the AFS program. Examination of records to be maintained by the respondents will occur as part of the periodic inspection of sources, which is part of EPA’s overall compliance and enforcement program.

The average annual Agency cost during the 3 years of the ICR is estimated to be \$17,138 for subpart GGG (from Table 1) and \$25,975 for subpart GGGa (from Table 3). This cost is based on a combination of technical hours (GS 12 Step 1 multiplied by a 1.6 benefits multiplication factor to account for government overhead expenses, for a total of \$42.45/hr), managerial hours (GS-13 Step 5 multiplied by 1.6 for a total of \$57.20/hr), and clerical hours (GS-6 Step 3 multiplied by 1.6 for a total of \$22.96/hr). The wage rates are from the 2006 General Schedule from the Office of Personnel Management. Details of the analysis appear in Table 1: Average annual EPA resource requirements resulting from NSPS Subpart GGG and Table 3: Average annual EPA resource requirements resulting from NSPS Subpart GGGa.

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

Respondent Universe 1 (Subpart GGG):

Regulation Citation: 40 CFR Part 60, Subpart GGG	(A) No. of Existing Sources	(B) No. of Reports for Existing Sources	(C) Total Annual Responses (AxB)
First year	45	2	90

Regulation Citation: 40 CFR Part 60, Subpart GGG	(A) No. of Existing Sources	(B) No. of Reports for Existing Sources	(C) Total Annual Responses (AxB)
Second year	45	2	90
Third year	45	2	90

The number of total respondents in each year is 45. The number represents the number of existing sources averaged over the three-year period.

The number of Total Annual Responses in each year is 90. The total annual labor costs are \$508,970. The number of burden hours on which this estimate is based is 6,495. Details upon which this estimate is based appear in Table 2: Annual burden of reporting and recordkeeping requirements as a result of NSPS Subpart GGG.

The total annual capital and O&M costs to the regulated entity are zero dollars. Capital and O&M costs are not applicable since this is a leak detection and repair program with no continuous monitoring equipment used.

Respondent Universe 2 (Subpart GGGa):

Regulation Citation: 40 CFR Part 60, Subpart GGGa	(A) No. of New Sources/Year	(B) No. of Initial Reports for New Sources	(C) No. of Existing Sources	(D) No. of Reports for Existing Sources	(E) Total Annual Responses (AxB+CxD)
First year	10	4	0	2	40
Second year	10	4	10	2	60
Third year	10	4	20	2	80

Each year 10 new plants are subject to initial notification requirements. In addition, in any given year, all of the new facilities from preceding years are subject to semiannual reporting requirements. Thus, an average of 20 facilities per year are subject to subpart GGGa over the three-year period.

The average number of Total Annual Responses per year is 60. The total annual labor costs are \$330,353. The number of burden hours on which this estimate is based is 4,216. Details upon which this estimate is based appear in Table 4: Annual burden of reporting and recordkeeping requirements as a result of NSPS Subpart GGGa.

The total annual capital and O&M costs to the regulated entity are zero dollars. Capital and O&M costs are not applicable since this is a leak detection and repair program with no continuous monitoring equipment used.

6(e) Bottom Line Burden Hours and Cost Tables

The bottom line burden hours and cost table for both the Agency and the respondents appear below (Tables 1, 2, 3, and 4).

6(f) Reasons for Change in Burden

The increase in burden cost from the most recently approved ICR is due to three reasons. First, the new standards in subpart GGGa require the same recordkeeping and reporting tasks as in subpart GGG as well as some additional recordkeeping requirements. Second, a higher number of new sources are subject to the new subpart GGGa than would have been subject to subpart GGG in the absence of the new standards. This is because many refineries already have process units that are subject to subpart GGG. Construction, reconstruction, or modification of another process unit at these facilities would not increase the number of new facilities subject to subpart GGG, but it does increase the number of new sources subject to subpart GGGa. Third, the revised analysis for this ICR includes time for management and clerical workers as well as technical staff.

6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 72 hours per response for subpart GGG and 70 hours per response for subpart GGGa. 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 not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations are listed in 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-2006-0699, which is available for online viewing at www.regulations.gov, or in person viewing at the Air and Radiation Docket and Information Center in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Avenue, NW, Washington, D.C. 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 Air and Radiation Docket and Information Center is (202) 566-1742. An electronic version of the public docket is available at www.regulations.gov. This site can be used to submit or view public comments,

access the index listing of the contents of the public 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 above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OAR-2006-0699 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 1: AVERAGE ANNUAL EPA RESOURCE REQUIREMENTS RESULTING FROM NSPS SUBPART GGG.

Activity	(A) EPA Hours/ Occurrence	(B) Occurrences/ Plant/Year	(C) EPA Hours/ Plant/Year ^a	(D) Plants/Year	(E) EPA Technical Hours/ Year ^b	(F) EPA Managerial Hours/Year (E x 0.05)	(G) EPA Clerical Hours/Year (E x 0.10)
Initial Performance Tests (New Plants)	24	1	24	0	0	0	0
Repeat Performance Tests ^c (New Plants)	24	0.2	4.8	0	0	0	0
Report Review (New Plants)							
Notification of construction	2	1	2	0	0	0	0
Notification of anticipated startup	0.5	1	0.5	0	0	0	0
Notification of actual startup	0.5	1	0.5	0	0	0	0
Notification of initial test	0.5	1.2	0.6	0	0	0	0
Review test results	8	1.2	9.6	0	0	0	0
Report Review (Existing Plants)							
Emission Reports	4	2	8	45	360	18	36
Total Annual Hours					360	18	36

Travel Expenses = (1 person x 0 plants/year x 3 days/plant x \$50 per diem) + (\$250 round trip/plant x 2 plants/year) = \$0/year

Salary^d = (360 hours/year x \$42.45/hour) + (18 hours/year x \$57.20/hour) + (36 hours/year x \$22.96/hour) = \$17,138/year

Total Annual Cost = \$0 + \$17,138 = \$17,138

^a C = A x B

^b E = C x D

^c Assume 20% of initial performance tests must be repeated due to failure

^d Estimate is based on a combination of technical hours (GS 12 Step 1 multiplied by a 1.6 benefits multiplication factor to account for government overhead expenses, for a total of \$42.45), managerial hours (GS-13 Step 5 multiplied by 1.6 for a total of \$57.20), and clerical hours (GS-6 Step 3 multiplied by 1.6 for a total of \$22.96). Wages are from the 2006 General Schedule from the Office of Personnel Management

TABLE 2: ANNUAL BURDEN OF REPORTING AND RECORDING REQUIREMENTS AS A RESULT OF NSPS SUBPART GGG^a

	(A) Hours per Occur- rence	(B) Occurrences/ Respondent/Yea r	(C) Hours/ Respondent/Yea r (A x B)	(D) Respondents/ Year	(E) Technica l Hours/ Year (C x D)	(F) Managerial Hours/Yea r (E x 0.05)	(G) Clerical Hours/Yea r (E x 0.10)	(H) Cost/ Year
1. APPLICATIONS (Not Applicable)								
2. SURVEY AND STUDIES (Not Applicable)								
3. REPORT REQUIREMENTS								
A. <u>Read Instructions</u>	1	1	1	0	0	0	0	0
B. <u>Required Activities</u>								
Initial performance test	24	1	24	0	0	0	0	0
Repeat performance test	24	1	24	0 ^b	0	0	0	0
C. <u>Create Information</u> (Included in 3B)								
D. <u>Gather Existing Information</u> (Included in 3E)								
E. <u>Write Report</u>								
Notification of construction or reconstruction	2	1	2	0	0	0	0	0
Notification of anticipated startup	2	1	2	0	0	0	0	0

	(A) Hours per Occur- rence	(B) Occurrences/ Respondent/Yea r	(C) Hours/ Respondent/Yea r (A x B)	(D) Respondents/ Year	(E) Technica l Hours/ Year (C x D)	(F) Managerial Hours/Yea r (E x 0.05)	(G) Clerical Hours/Yea r (E x 0.10)	(H) Cost/ Year
Notification of actual startup	2	1	2	0	0	0	0	0
Notification of initial performance test	2	1	2	0	0	0	0	0
Report of performance test (Included in 3B)								
Semiannual work practice reports	8	2	16	45 ^c	720	36	72	64,889
4. RECORDKEEPING REQUIREMENTS								
A. <u>Read Instructions</u> (Included in 3A)								
B. <u>Plan Activities</u> (Included in 3B)								
C. <u>Implement Activities</u> (Included in 3B)								
D. <u>Develop Record System</u> (Not Applicable)								
E. <u>Time to Enter Information</u>								
Records of operating parameters ^e	0.3	365 ^d	109.5	45 ^c	4,928	246	493	444,081

	(A) Hours per Occurrence	(B) Occurrences/ Respondent/Year	(C) Hours/ Respondent/Year (A x B)	(D) Respondents/ Year	(E) Technical Hours/ Year (C x D)	(F) Managerial Hours/Year (E x 0.05)	(G) Clerical Hours/Year (E x 0.10)	(H) Cost/ Year
F. <u>Train Personnel</u> (Not Applicable)								
G. <u>Audits</u> (Not Applicable)								
5. TOTAL ANNUAL BURDEN					5,648	282	565	\$508,970

^a Only existing facilities because all new sources will be subject to subpart GGGa.

^b Assume 20% of initial performance tests must repeat due to failure.

^c Assume operation is 365 days per year as specified in the NSPS review document.

^d Assume that average number of affected facilities over the next three years is equal to the current number of facilities (45) because affected facilities after November 7, 2006 will be subject to subpart GGGa instead of subpart GGG.

^e Although monitoring of the various components may be required on a weekly, monthly, quarterly, semi-annual or annual basis, given the number of components that must be monitored at any facility, monitoring overall is essentially occurring daily. Therefore, it is assumed that the average recordkeeping time for each day's worth of monitoring is 0.3 hours and that monitoring is done 365 days per year.

TABLE 3: AVERAGE ANNUAL EPA RESOURCE REQUIREMENTS RESULTING FROM NSPS SUBPART GGGa.

Activity	(A) EPA Hours/ Occurrence	(B) Occurrences/ Plant/Year	(C) EPA Hours/ Plant/Year ^a	(D) Plants/Year	(E) EPA Technical Hours/ Year ^b	(F) EPA Managerial Hours/Year	(G) EPA Clerical Hours/Year
Initial Performance Tests (New Plants)	24	1	24	10	240	12	24
Repeat Performance Tests ^c (New Plants)	24	0.2	4.8	2 ^c	9.6	0.48	1
Report Review (New Plants)							
Notification of construction	2	1	2	10	20	1	2
Notification of anticipated startup	0.5	1	0.5	10	5	0.25	0.5
Notification of actual startup	0.5	1	0.5	10	5	0.25	0.5
Notification of initial test	0.5	1.2	0.6	10	6	0.3	0.6
Review test results	8	1.2	9.6	10	96	4.8	9.6
Report Review (Existing Plants)							
Emission Reports	4	2	8	10	80	4	8
Total Annual Hours					461.6	23.1	46.2

Travel Expenses = (1 person x 10 plants/year x 3 days/plant x \$50 per diem) + (\$250 round trip/plant x 10 plants/year) = \$4,000/year

Salary^d = (461.6 hours/year x \$42.45/hour) + (23.1 hours/year x \$57.20/hour) + (46.2 hours/year x \$22.96/hour) = \$21,975/year

Total Annual Cost = \$4,000 + \$21,975 = \$25,975

^a C = A x B

^b E = C x D

^c Assume 20% of initial performance tests must be repeated due to failure

^d Estimate is based on a combination of technical hours (GS-12 Step 1 multiplied by a 1.6 benefits multiplication factor to account for government overhead expenses for a total of \$42.45), managerial hours (GS-13 Step 5 multiplied by 1.6 for a total of \$57.20), and clerical hours (GS-6 Step 3 multiplied by 1.6 for a total of \$22.96). Wages are from the 2006 General Schedule from the Office of Personnel Management.

TABLE 4: ANNUAL BURDEN OF REPORTING AND RECORDING REQUIREMENTS AS A RESULT OF NSPS SUBPART GGGa^a

	(A) Hours per Occur- -rence	(B) Occurrences/ Respondent/Yea r	(C) Hours/ Respondent/Yea r (A x B)	(D) Respondents / Year	(E) Technical Hours/Yea r (C x D)	(F) Managerial Hours/Yea r (E x 0.05)	(G) Clerical Hours/Yea r (E x 0.10)	(F) Cost/ Year
1. APPLICATIONS (Not Applicable)								
2. SURVEY AND STUDIES (Not Applicable)								
3. REPORT REQUIREMENTS								
A. <u>Read Instructions</u>	1	1	1	10	10	0.5	1	901
B. <u>Required Activities</u>								
Initial performance test	24	1	24	10	240	12	24	21,630
Repeat performance test	24	1	24	2 ^b	48	2.4	4.8	4,326
C. <u>Create Information</u> (Included in 3B)								
D. <u>Gather Existing Information</u> (Included in 3E)								
E. <u>Write Report</u>								
Notification of construction or reconstruction	2	1	2	10	20	1	2	1,802
Notification of anticipated startup	2	1	2	10	20	1	2	1,802

	(A) Hours per Occur- -rence	(B) Occurrences/ Respondent/Yea r	(C) Hours/ Respondent/Yea r (A x B)	(D) Respondents / Year	(E) Technical Hours/Yea r (C x D)	(F) Managerial Hours/Yea r (E x 0.05)	(G) Clerical Hours/Yea r (E x 0.10)	(F) Cost/ Year
Notification of actual startup	2	1	2	10	20	1	2	1,802
Notification of initial performance test	2	1	2	10	20	1	2	1,802
Report of performance test (Included in 3B)								
Semiannual work practice reports	8	2	16	20 ^d	320	16	32	28,839
4. RECORDKEEPING REQUIREMENTS								
A. <u>Read Instructions</u> (Included in 3A)								
B. <u>Plan Activities</u> (Included in 3B)								
C. <u>Implement Activities</u> (Included in 3B)								
D. <u>Develop Record System</u> (Not Applicable)								
E. <u>Time to Enter Information</u>								
Records of operating parameters at large refiners ^e	0.40	365 ^c	148	17.4 ^{d,f}	2,571	129	257	231,700

	(A) Hours per Occur- -rence	(B) Occurrences/ Respondent/Yea r	(C) Hours/ Respondent/Yea r (A x B)	(D) Respondents / Year	(E) Technical Hours/Yea r (C x D)	(F) Managerial Hours/Yea r (E x 0.05)	(G) Clerical Hours/Yea r (E x 0.10)	(F) Cost/ Year
Records of operating parameters for small refineries	0.42 ^b	365 ^c	153	2.6 ^{d,f}	397	20	40	35,747
F. <u>Train Personnel</u> (Not Applicable)								
G. <u>Audits</u> (Not Applicable)								
5. TOTAL ANNUAL BURDEN					3,666	183	367	\$330,353

^a Estimating that there are approximately 30 refineries (respondents) which become subject over a 3-year period. The number of new sources per year equals $30/3 = 10$.

^b Assume 20% of initial performance tests must repeat due to failure.

^c Assume operation is 365 days per year as specified in the NSPS review document.

^d Assume that average number of affected facilities over the next three years is estimated by the number of affected facilities in the second year (10 new and 10 existing).

^e Although monitoring of the various components may be required on a weekly, monthly, quarterly, semi-annual or annual basis, given the number of components that must be monitored at any facility, monitoring overall is essentially occurring daily. An additional 0.10 hours per day are needed to complete the tasks required by the new standards.

^f Assume 26 percent of the new process units per year are at small refineries and half of those use manual recordkeeping of instrument readings ($20 \times 0.26 \times 0.5 = 2.6$).

^g Estimated that most facilities need an additional 0.10 hours per day to complete the tasks required by the new standards. Estimated that 0.113 hours per day are needed for small refineries with manual recordkeeping of instrument readings.