

**SUPPORTING STATEMENT  
ENVIRONMENTAL PROTECTION AGENCY**

**NSPS for Nitric Acid Plants for Which Construction, Reconstruction, or Modification  
Commenced After September 30, 2011  
(40 CFR part 60, subpart Ga)**

**Part A of the Supporting Statement**

**1. Identification of the Information Collection**

*(a) Title and Number of the Information Collection.*

“NSPS for Nitric Acid Plants for Which Construction, Reconstruction, or Modification Commenced After September 30, 2011 (40 CFR Part 60, Subpart Ga).” The EPA ICR tracking number is 2445.01, OMB Control Number 2060-NEW.

*(b) Short Characterization.*

The New Source Performance Standards (NSPS) for nitric acid plants (40 CFR part 60, subpart G) were proposed on August 17, 1971, and promulgated on June 14, 1974. This information collection is for a new subpart Ga, which will apply to nitric acid production units which commence construction, modification, or reconstruction after the date of proposal. Nitrogen oxide (NO<sub>x</sub>) is the pollutant regulated under this subpart. The standards limit nitrogen oxides, expressed as nitrogen dioxide (NO<sub>2</sub>), in excess of 0.50 lb per ton of acid produced. This information is being collected to assure compliance with 40 CFR part 60, subpart Ga.

In general, all NSPS standards require initial notifications, performance tests, and periodic reports. 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. These notifications, reports, and records are essential in determining compliance, and are required 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. 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 United States Environmental Protection Agency (EPA) regional office.

Potential respondents are owners or operators of new nitric acid production units. It is estimated that an additional 4 newly constructed nitric acid production units will become subject to the regulation in the next three years. Plants can have more than one nitric acid production unit onsite.

## 2. Need for and Use of the Collection

### (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 system of emission reduction which (taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. Section 111(a)(1).

The Agency refers to this charge as selecting the best demonstrated technology (BDT). Section 111 also requires that the Administrator review and, if appropriate, revise such standards every eight years.

In addition, section 114(a) states that the Administrator may require any owner 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 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, NO<sub>x</sub> emissions from nitric acid plants cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, the NSPS will be promulgated for this source category at 40 CFR part 60, subpart Ga.

### (b) *Use/Users of the Data.*

The control of emissions of NO<sub>x</sub> from nitric acid plants not only requires the installation of properly designed equipment, but also the operation and maintenance of that equipment. Emissions of NO<sub>x</sub> from nitric acid plants are the result of operation of the affected plants.

The standards are achieved by the reduction of pollutant emissions using control technology. The notifications required in the applicable regulations are used to inform the Agency or delegated authority when a source becomes subject to the requirements of the

regulations. The reviewing authority may then inspect the source to check if the pollution control devices are properly installed and operated and the regulations are being met.

For our analysis of these standards, we assume sources will rely on the reduction of NO<sub>x</sub> by using Selective Catalytic Reduction (SCR). The required notifications are used to inform the Agency or delegated authority when a source becomes subject to the standard. The reviewing authority may then inspect the source to check if the pollution control devices are properly installed and operated 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 note the operating conditions under which compliance was achieved. The periodic reports are used for problem identification, as a check on source operation 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 plants affected by the NSPS continue to operate the control equipment used to achieve compliance with the NSPS. Adequate monitoring, recordkeeping, and reporting are necessary to ensure compliance with these standards, as required by the Clean Air Act. 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**

#### *(a) Nonduplication.*

If the subject standards have not been delegated, the information is sent directly to the appropriate EPA regional office. Otherwise, the information is sent directly to the delegated state or local agency. If a state or local agency has adopted 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.

#### *(b) Public Notice Required Prior to ICR Submission to OMB.*

EPA will solicit public comment by means of a Federal Rule Notice of Proposed Rulemaking.

#### *(c) Consultations.*

During development of the proposed revisions, EPA held meetings and conference calls with representatives of The Fertilizer Institute (TFI). We estimate that approximately 4 nitric acid production units will be constructed, modified, or reconstructed, or expanded over the next 3 years.

(d) *Effects of Less Frequent Collection.*

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

(e) *General Guidelines.*

None of these reporting or recordkeeping requirements violate any of the regulations established by the Office of Management and Budget (OMB) at 5 CFR 1320.5.

(f) *Confidentiality.*

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

(g) *Sensitive Questions.*

None of the reporting or recordkeeping requirements contain sensitive questions.

#### **4. The Respondents and the Information Requested**

(a) *Respondents/NAICS Codes.*

The respondents to the recordkeeping and reporting requirements are nitric acid plants. The North American Industry Classification System (NAICS) code for respondents affected by the standards is 325311, Nitrogenous Fertilizer Manufacturing.

(b) *Information Requested.*

(i) *Data Items, Including Recordkeeping Requirements.* All data in this ICR that is recorded and/or reported is required by NSPS for Nitric Acid Plants for Which Construction, Reconstruction, or Modification Commenced After February 2011 (40 CFR part 60, subpart Ga).

A source must make the following reports:

<b>Reports for 40 CFR part 60, subpart Ga</b>	
Notification of construction or modification application	60.6(a)
Notification of construction/reconstruction	60.7(a)(1)
Initial notifications	60.7(a)(3)
Notification of actual startup.	60.7(a)(3)
Physical or operational change.	60.7(a)(4)
Notification of demonstration of continuous monitoring system	60.7(a)(5)
Initial performance test results.	60.8(a), 60.77a(a)
Initial performance test.	60.8(d), 60.72a(a)
Compliance status.	60.7(a)(7)
Malfunction report.	60.7(b), 60.77a(d)
NO <sub>x</sub> emission rates that are not in compliance with the emission standard.	60.77a(b)(2)

A source must maintain the following records:

<b>Recordkeeping for 40 CFR part 60, subpart Ga</b>	
Malfunctions and periods where the continuous monitoring system is inoperative.	60.76a(b)
Records are required to be retained for two (2) years.	60.7(f)
Records of ongoing monitoring.	60.7(f)
Record daily production and nitric acid concentration.	60.76a(b)(3)
Records of noncompliance with the emission standard and description of corrective action.	60.76a(b)(4)

### *Electronic Reporting*

Currently, sources are using monitoring equipment that provides automated parameter data, e.g., continuous emissions monitoring. Although personnel at the affected facility must evaluate the data, this type of monitoring equipment has significantly reduced the burden associated with monitoring and recordkeeping. In addition, some regulatory agencies are setting up electronic reporting systems to allow sources to report electronically which is reducing the reporting burden. However, electronic reporting systems are still not widely used by the

regulatory agencies. It is estimated that approximately 10 percent of the respondents will use electronic reporting.

(ii) *Respondent Activities.* The respondent activities required by subpart Ga are listed in the following tables.

<b>Respondent Activities</b>
Read instructions.
Install, calibrate, maintain, and operate Continuous Emission Rate Monitoring Systems (CERMS), which include NO <sub>x</sub> and gas flow rate monitors.
Write the notifications and reports listed above.
Enter information required to be recorded above.
Train personnel to be able to respond to a collection of information.
Transmit or otherwise disclose the information.
Train personnel on CERMS operation and maintenance.

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

(a) *Agency Activities.*

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

<b>Agency Activities</b>
Observe initial performance tests.
Review reports, including performance test reports and reports documenting NO <sub>x</sub> emission rates that are not in compliance the standard in subpart Ga.
Review notifications, including construction/reconstruction commencement, actual startup, and performance test.
Review performance test results.

(b) *Collection Methodology and Management.*

Following notification of startup, the reviewing authority might inspect the source to determine whether the pollution control devices are properly installed and operated. Performance test reports are used by the Agency to discern a source’s initial capability to comply with the emission standard. Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs. The reports of noncompliance 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 AIRS Facility Subsystem (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 and annual emission inventory 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, 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.

*(c) Small Entity Flexibility*

Most, if not all, of the anticipated new sources will be large entities (e.g., large businesses). However, the impact on potential small entities (i.e., small business) was taken into consideration during the development of the regulation. Due to technical considerations involving the process operation 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 requirements the minimum needed to ensure compliance and, therefore, cannot reduce them further for small entities. To the extent that larger business can use economies of scale to reduce their burden, the overall burden will be reduced.

*(d) Collection Schedule.*

The specific frequency for each information collection activity within this request is shown in Tables 1a through 1c: Respondent Burden of Reporting and Recordkeeping Requirements, NSPS for Nitric Acid Plants (40 CFR Part 60, Subpart Ga) for the first three years of the information collection.

## **6. Estimating the Burden and Cost of the Collection**

Tables 1a-1c: Respondent Burden of Reporting and Recordkeeping Requirements, NSPS for Nitric Acid Plants (40 CFR part 60, subpart Ga) documents the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry for the subpart included in this ICR for each of the first 3 years. Table 1d contains a summary of the respondent burden costs and hours detailed in Tables 1a through 1c.

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.

(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 968 hours per year (3 Year Average Hours from Table 1d). These hours are based on Agency studies and background documents from the development of the regulation, Agency knowledge, and experience with the NSPS program, and any comments received.

(b) *Estimating Respondent Costs.*

(i) *Estimating Labor Costs.* Labor rates and associated costs are based on Bureau of Labor Statistics (BLS) data. Technical, management, and clerical average hourly rates for private industry workers were taken from the United States Department of Labor, Bureau of Labor Statistics, September 2010, "Table 2. Civilian Workers, by occupational and industry group," available at <http://www.bls.gov/news.release/ecec.t02.htm>. Wages for occupational groups are used as the basis for the labor rates with a total compensation of \$46.82 per hour for technical, \$49.14 per hour for managerial, and \$23.41 per hour for clerical. These rates represent salaries plus fringe benefits and do not include the cost of overhead. An overhead rate of 110 percent is used to account for these costs. The fully-burdened hourly wage rates used to represent respondent labor costs are: technical at \$98.32, management at \$103.19, and clerical at \$49.16.

(ii) *Estimating Capital and Operations and Maintenance (O&M) Costs.* The capital costs associated with the information collection requirements will include the costs to conduct performance tests, startup costs for CERMS, and purchase file cabinets for keeping records. The rule will require an initial performance test for each new nitric acid plant. The annual operation and maintenance costs are the ongoing costs to maintain the monitors and other costs such as photocopying and postage.

The annual average capital/startup costs for CERMS that will be used to control NO<sub>x</sub> emissions is \$136,070 (costs derived from EPA Model) with an annual operations and maintenance costs of \$23,488.

The total respondent costs have been calculated as the addition of the capital/startup costs, and the annual operation and maintenance costs. The average annual cost for capital/startup and operation and maintenance costs to industry over the next three years of the ICR are estimated to be \$159,558. The continuous monitoring costs that are included in this section consist only of those capital/startup and O&M costs that a source incurs as a result of the standard. Some continuous monitoring costs may not be included in this section. For instance, if a particular industry typically utilizes a control device that must have a continuous monitor (e.g., temperature, pressure drop, etc.) to function properly, and the recording of additional measurements beyond the minimum are required by the standard, then there is no capital/startup or O&M cost, but there is a labor cost to record the additional readings. Such a cost would not appear in this section, but in the industry burden Section 6(d) below.

It is assumed that the 4 newly constructed nitric acid plants will not be located at existing facilities. It is anticipated that new units will use CERMS for compliance with the proposed new



NO<sub>x</sub> limit. Initial CERMS testing is usually conducted by an installation contractor such that the cost of the emissions testing is a capital cost. Testing costs are \$15,019 for each NO<sub>x</sub> CEMS and \$6,229 for a flow meter (assumes one flow meter per stack). The 4 new sources in this sector result in a total capital cost of approximately \$76,496 for CERMS testing over the next three years.

(iii) *Annualizing Capital Costs.* The annualized capital costs include the costs for one year (1.2 units) for NO<sub>x</sub> CEMS, flow meters, and file cabinets. The annualized capital costs for equipment associated with NO<sub>x</sub> CEMS and flow meters were calculated using a 7 percent interest rate and a 10 year life (i.e., CRF of 0.1424). The annualized capital cost for file cabinets was calculated using a 7 percent interest rate and a 15-year life (i.e., CRF of 0.1098). The total annualized capital costs total \$42,776. The CEMS Monitoring Costs Spreadsheet can be found in the docket (See Section 6(g) for docket information).

(c) *Estimating Agency Burden and Cost.*

Tables 2a-2c: Burden and Cost to the Agency—NSPS for Nitric Acid Plants documents the costs of this NSPS revision to the Agency for the first 3 years of the information collection. 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. Table 2d contains a summary of the agency burden costs and hours detailed in Tables 2a-2c. The average annual Agency cost during the three years of the ICR is estimated to be \$3,206.

The Agency labor rates are from the Office of Personnel Management (OPM) 2008 General Schedule which excludes locality rates of pay. These rates can be obtained from Salary Table 2011-GS, available on the OPM website at [http://www.opm.gov/oca/11tables/html/g\\_s\\_h.asp](http://www.opm.gov/oca/11tables/html/g_s_h.asp). The government employee labor rates are \$15.63 per hour for clerical (GS-6, Step 3), \$28.88 for technical (GS-12, Step 1), and \$38.92 for managerial (GS-13, Step 5). These rates were increased by 60 percent to include fringe benefits and overhead. The fully-burdened wage rates used to represent Agency labor costs are: clerical at \$25.01, technical at \$46.21, and managerial at \$62.27.

(d) *Estimating the Respondent Universe and Total Burden and Costs.*

It is estimated that 4 newly constructed nitric acid production units will become subject to the proposed regulation in the next three years. Nitric acid production was estimated for 2006 (TSD for Greenhouse Gas Reporting Rule), using the production growth of 6.5% from 2006 to 2007 (ICIS) and the predicted production growth rate of 3% for 2007 through 2016 (ICIS). In the period from 2010 through 2016, the growth was approximately 1.6 million tons of nitric acid. Assuming 350 days per year, this equals approximately 4,586 tpd of nitric acid production. Using the model plants, the estimate of 4,586 tpd equals 2 production trains that produce 300 tpd, and 4 production trains that produce 1,000 tpd over the five year period after promulgation.

The total annual number of responses for the monitoring, recordkeeping, and reporting requirements in subpart Ga is 22 for the 4 newly constructed nitric acid units.

The total annual labor costs are \$91,808. Details upon which this estimate is based appear in Table 1a.

(e) *Bottom Line Burden Hours and Cost Tables.*

The bottom line burden hours and cost tables for both the Agency and the respondents are attached. The annual public reporting and recordkeeping burden for this collection of information is estimated to average 44 hours per response.

(f) *Reasons for Change in Burden.*

The requested burden is for a new subpart that will apply to nitric acid production units which commence construction, modification, or reconstruction after the date of proposal.

(g) *Burden Statement.*

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 44 hours per response. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or 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's 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-2007-0877. An electronic version of the public docket is available at [www.regulations.gov](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 Docket ID Number EPA-HQ-OAR-2007-0877. The documents are also available for public viewing at the EPA Docket Center, EPA West, Room 3334, 1301 Constitution Avenue, NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the docket center is (202) 566-1742. Send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget (OMB), Attn: Desk Officer for EPA, 725 17th St., NW, Washington, DC 20503. Please include the EPA Docket ID Number EPA-HQ-OAR-2007-0877 and OMB Control Number 2060-NEW in any correspondence.

## **Part B of the Supporting Statement**

This part is not applicable because statistical methods are not used in data collection associated with the rule.

**Table 1a. Year 1 Respondent Burden and Cost-NSPS for Nitric Acid Plants (40 CFR part 60, subpart Ga)**

Year 1 - Respondent	(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)	(F) Cost/ Year
1. APPLICATIONS (Not Applicable)								
2. SURVEY AND STUDIES (Not Applicable)								
3. ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS (Not Applicable)								
4. REPORT REQUIREMENTS								
A. Read Instructions								
New Sources	1	1	1	1.2	1.2	0.1	0.2	\$131
B. Required Activities								
New Sources - Initial Performance Test	180	1	180	1.2	216	10.8	21.6	\$23,557
New Sources - Demonstration of CERMS	180	1	180	1.2	216	10.8	21.6	\$23,557
New Sources - Daily monitoring (CERMS)	0.5	330	165	1.2	198	9.9	19.8	\$21,594
C. Create Information (Included in 4B)								
D. Gather Existing Information (Included in 4E)								
E. Write Report								
New Sources - Notification of construction/reconstruction	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Notification of actual startup	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Physical or Operational Change	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Notification of Demonstration of CERMS	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Notification of Initial Performance Test	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Report of Performance Test	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Report of Noncompliance with NOX emission standard	2	1	2	0.12	0.24	0.0	0.0	\$26
5. RECORDKEEPING REQUIREMENTS								
A. Read Instructions (Included in 4A)								
B. Plan Activities (Included in 4B)								
C. Implement Activities (Included in 4B)								
D. Record Data ( Not Applicable)								
New Sources - Record times of noncompliance with emission standard and document corrective actions.	0.5	1	0.5	0.12	0.1	0.0	0.0	\$7
E. Time to Transmit or Disclose Information								
New Sources - Daily production and flow rates	8	1	8	1.2	9.6	0.5	1.0	\$1,047
New Sources - Data Collection	0.125	330	33	1.2	39.6	2.0	4.0	\$4,319
New Sources - Records of Startups, Shutdowns, malfunctions, etc	8	1	8	1.2	9.6	0.5	1.0	\$1,047
F. Time to Train Personnel								
Train Personnel for CERMS maintenance	16	2	32	1.2	38.4	1.9	3.8	\$4,188
G. Time for Audits (Not Applicable)								
TOTAL ANNUAL LABOR BURDEN AND COST		675		17	743	37	74	\$81,044
						855	Hours	
ANNUAL CAPITAL COSTS								
Performance tests								\$76,492
File cabinets								\$ 940
Other capital costs of installation (ODC and labor)								\$136,174
Total annual capital								\$213,606
ANNUALIZED CAPITAL COSTS								
File cabinets (15 year life, 7% interest; CRF=0.1098)								\$ 103
Other annualized capital costs (10 year life, 7% interest, CRF=0.1424)								\$ 19,185
Total annualized capital								\$ 19,288
TOTAL ANNUAL COSTS (O&M)								\$23,488
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								\$ 42,776

**Table 1b. Year 2 Respondent Burden and Cost-NSPS for Nitric Acid Plants (40 CFR part 60, subpart Ga)**

Year 2 - Respondent	(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)	(F) Cost/ Year
1. APPLICATIONS (Not Applicable)								
2. SURVEY AND STUDIES (Not Applicable)								
3. ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS (Not Applicable)								
4. REPORT REQUIREMENTS								
A. Read Instructions								
New Sources	1	1	1	2.4	2.4	0.1	0.2	\$262
B. Required Activities								
New Sources - Initial Performance Test	180	1	180	1.2	216	10.8	21.6	\$23,557
New Sources - Demonstration of CERMS	180	1	180	1.2	216	10.8	21.6	\$23,557
New Sources - Daily monitoring (CERMS)	0.5	330	165	1.2	198	9.9	19.8	\$21,594
C. Create Information (Included in 4B)								
D. Gather Existing Information (Included in 4E)								
E. Write Report								
New Sources - Notification of construction/reconstruction	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Notification of actual startup	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Physical or Operational Change	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Notification of Demonstration of CERMS	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Notification of Initial Performance Test	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Report of Performance Test	2	1	2	1.2	2.4	0.1	0.2	\$262
New sources - Report of Noncompliance with NOX emission standard	2	1	2	0.24	0.5	0.0	0.0	\$52
5. RECORDKEEPING REQUIREMENTS								
A. Read Instructions (Included in 4A)								
B. Plan Activities (Included in 4B)								
C. Implement Activities (Included in 4B)								
D. Record Data ( Not Applicable)								
Record of noncompliance	0.5	1	0.5	0.24	0.1	0.0	0.0	\$13
E. Time to Transmit or Disclose Information								
New Sources - Daily production and flow rates	8	1	8	2.4	19.2	1	1.9	\$2,094
New Sources - Data Collection	0.125	330	33	2.4	79.2	4	7.9	\$8,638
New Sources - Records of Startups, Shutdowns, malfunctions, etc	8	1	8	2.4	19.2	1	1.9	\$2,094
New Sources -								
F. Time to Train Personnel								
Train Personnel for CERMS maintenance	16	2	32	2.4	76.8	3.8	7.7	\$8,376
G. Time for Audits (Not Applicable)								
TOTAL ANNUAL LABOR BURDEN AND COST		675		23	842	42	84	\$91,808
						968	Hours	
ANNUAL CAPITAL COSTS								
Performance tests								\$76,492
File cabinets								\$ 940
Other capital costs of installation (ODC and labor)								\$136,174
Total annual capital								\$213,606
ANNUALIZED CAPITAL COSTS								
File cabinets (15 year life, 7% interest; CRF=0.1098)								\$ 103
Other annualized capital costs (10 year life, 7% interest, CRF=0.1424)								\$ 19,185
Total annualized capital								\$ 19,288
TOTAL ANNUAL COSTS (O&M)								\$23,488
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								\$ 42,776

**Table 1c. Year 3 Respondent Burden and Cost-NSPS for Nitric Acid Plants (40 CFR part 60, subpart Ga)**

Year 3 - Respondent	(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)	(F) Cost/ Year
1. APPLICATIONS (Not Applicable)								
2. SURVEY AND STUDIES (Not Applicable)								
3. ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS (Not Applicable)								
4. REPORT REQUIREMENTS								
A. Read Instructions								
New Sources	1	1	1	3.6	3.6	0.2	0.4	\$393
B. Required Activities								
New Sources - Initial Performance Test	180	1	180	1.2	216	10.8	21.6	\$23,557
New Sources - Demonstration of CERMS	180	1	180	1.2	216	10.8	21.6	\$23,557
New Sources - Daily monitoring (CERMS)	0.5	330	165	1.2	198	9.9	19.8	\$21,594
C. Create Information (Included in 4B)								
D. Gather Existing Information (Included in 4E)								
E. Write Report								
New Sources - Notification of construction/reconstruction	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Notification of actual startup	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources -	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Notification of Demonstration of CERMS	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Notification of Initial Performance Test	2	1	2	1.2	2.4	0.1	0.2	\$262
New Sources - Report of Performance Test	2	1	2	1.2	2.4	0.1	0.2	\$262
New sources -	2	1	2	0.36	0.7	0.0	0.1	\$79
5. RECORDKEEPING REQUIREMENTS								
A. Read Instructions (Included in 4A)								
B. Plan Activities (Included in 4B)								
C. Implement Activities (Included in 4B)								
D. Record Data ( Not Applicable)								
Record of noncompliance	0.5	1	0.5	0.36	0.2	0.0	0.0	\$20
E. Time to Transmit or Disclose Information								
New Sources - Daily production and flow rates	8	1	8	3.6	28.8	1.4	2.9	\$3,141
New Sources - Data Collection	0.125	330	33	3.6	118.8	5.9	11.9	\$12,956
New Sources - Records of Startups, Shutdowns, malfunctions, etc	8	1	8	3.6	28.8	1.4	2.9	\$3,141
New Sources -								
F. Time to Train Personnel								
Train Personnel for CERMS maintenance	16	2	32	3.6	115.2	5.8	11.5	\$12,564
G. Time for Audits (Not Applicable)								
TOTAL ANNUAL LABOR BURDEN AND COST		675		30	941	47	94	\$102,572
						1,082	Hours	
ANNUAL CAPITAL COSTS								
Performance tests								\$76,492
File cabinets								\$ 940
Other capital costs of installation (ODC and labor)								\$136,174
Total annual capital								\$213,606
ANNUALIZED CAPITAL COSTS								
File cabinets (15 year life, 7% interest; CRF=0.1098)								\$ 103
Other annualized capital costs (10 year life, 7% interest, CRF=0.1424)								\$ 19,185
Total annualized capital								\$ 19,288
TOTAL ANNUAL COSTS (O&M)								\$23,488
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								\$ 42,776

**Table 1d. Summary of Respondent Burden and Cost-NSPS for Nitric Acid Plants (40 CFR part 60, subpart Ga)**

<b>Year</b>	<b>Total Annual Labor Burden (hours)</b>	<b>Total Annual Costs</b>
1	855	\$81,044
2	968	\$91,808
3	1,082	\$102,572
Total	2,904	\$275,424
3-Year Average	968	\$91,808



**Table 2a. Year 1 Burden and Cost to the Agency—NSPS for Nitric Acid Plants**

Activity	(A) EPA Hours/ Occurrence	(B) Occurrences/ Plant/Year	(C) EPA Hours/ Plant/Year (A x B)	(D) Plants/ Year	(E) EPA Technical Hours/ Year (C x D)	(F) EPA Managerial Hours/Year	(G) EPA Clerical Hours/Year	(H) Cost, \$
Observe Initial Performance Tests	24	1	24	1.2	28.8	1.44	0.288	\$ 1,428
Notification of construction/reconstruction commencement	2	1	2	1.2	2.4	0.12	0.24	\$ 119
Notification of actual startup	0.5	1	0.5	1.2	0.6	0.03	0.06	\$ 30
Notification of performance test	0.5	1	0.5	1.2	0.6	0.03	0.06	\$ 30
Review Test Results	8	1	8	1.2	9.6	0.48	0.096	\$476
Review NOX noncompliance reports	8	1	8	0.12	0.96	0.048	0.0096	\$ 48
Total Annual Hours					43	2	0.43	\$2,130
						46	hours	
Travel Expenses								\$ 1,028
								\$ 3,158

**Table 2b. Year 2 Burden and Cost to the Agency—NSPS for Nitric Acid Plants**

Activity	(A) EPA Hours/ Occurrence	(B) Occurrences/ Plant/Year	(C) EPA Hours/ Plant/Year (A x B)	(D) Plants/ Year	(E) EPA Technical Hours/ Year (C x D)	(F) EPA Managerial Hours/Year	(G) EPA Clerical Hours/Year	(H) Cost, \$
Observe Initial Performance Tests	24	1	24	1.2	28.8	1.44	0.288	\$ 1,428
Notification of construction/reconstruction commencement	2	1	2	1.2	2.4	0.12	0.24	\$ 119
Notification of actual startup	0.5	1	0.5	1.2	0.6	0.03	0.06	\$ 30
Notification of performance test	0.5	1	0.5	1.2	0.6	0.03	0.06	\$ 30
Review Test Results	8	1	8	1.2	9.6	0.48	0.096	\$476
Review NOX noncompliance reports	8	1	8	0.24	1.92	0.096	0.0192	\$ 95
Total Annual Hours					44	2.2	0.4	\$2,177
						47	hours	
Travel Expenses								\$ 1,028
								\$ 3,206

**Table 2c. Year 3 Burden and Cost to the Agency—NSPS for Nitric Acid Plants**

Activity	(A) EPA Hours/ Occurrence	(B) Occurrences/ Plant/Year	(C) EPA Hours/ Plant/Year (A x B)	(D) Plants/ Year	(E) EPA Technical Hours/ Year (C x D)	(F) EPA Managerial Hours/Year	(G) EPA Clerical Hours/Year	(H) Cost, \$
Observe Initial Performance Tests	24	1	24	1.2	28.8	1.44	0.288	\$ 1,428
Notification of construction/reconstruction commencement	2	1	2	1.2	2.4	0.12	0.24	\$ 119
Notification of actual startup	0.5	1	0.5	1.2	0.6	0.03	0.06	\$ 30
Notification of performance test	0.5	1	0.5	1.2	0.6	0.03	0.06	\$ 30
Review Test Results	8	1	8	1.2	9.6	0.48	0.096	\$476
Review NOX noncompliance reports	8	1	8	0.36	2.88	0.144	0.0288	\$ 143
Total Annual Hours					45	2.2	0.4	\$2,225
						48	hours	
Travel Expenses								\$ 1,028
								\$ 3,253

a Assume agency personnel visit 1.2 new plant each year.

Travel Expenses = (1 person x 1.2 plant/year x 3 days/plant x \$117 per diem) + (\$608 round trip/plant x 1 plant/year) = \$1,028/year

**Table 2d. Summary of Burden and Cost to the Agency—NSPS for Nitric Acid Plants**

Year	Total Annual Labor Burden (Hours)	Total Annual Costs
1	46	\$3,158
2	47	\$3,206
3	47	\$3,253
Total	139	\$9,617
3-Year Average	46	\$3,206