

**SUPPORTING STATEMENT
ENVIRONMENTAL PROTECTION AGENCY**

NSPS for Portland Cement Plant (40 CFR part 60, subpart F) (Proposed Rule)

Part A of the Supporting Statement

1. Identification of the Information Collection

(a) Title and Number of the Information Collection.

NSPS for Portland Cement Plants (40 CFR Part 60, Subpart F).” OMB control number 2060-NEW has been assigned to the ICR. The EPA ICR tracking number is 2307.01.

(b) Short Characterization.

The New Source Performance Standards (NSPS) for the regulations published at 40 CFR part 60, subpart F were proposed on August 17, 1971, promulgated on December 23, 1971, and revised on December 14, 1988. These regulations apply to the following facilities in portland cement plants: kilns, clinker coolers, raw mill systems, raw mill dryers, raw material storage, clinker storage, finished product storage, conveyor transfer points, bagging and bulk loading and unloading systems. New facilities include those that commenced construction, modification or reconstruction after the date of proposal. This information is being collected to assure compliance with 40 CFR part 60, subpart F.

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 or existing portland cement plants. It is estimated that an additional 12 newly constructed portland cement kilns located at existing portland cement plants will become subject to the regulation in the next three years. Plants can have more than one kiln 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, particulate emissions from portland cement plants cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, the NSPS was promulgated for this source category at 40 CFR part 60, subpart F.

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

The control of emissions of particulate matter and NO_x and SO₂ resulting from portland cement plants not only requires the installation of properly designed equipment, but also the operation and maintenance of that equipment. Emissions of particulate matter, NO_x, and SO₂ from portland cement plants are the result of operation of the affected plants. These standards rely on the reduction of particulate matter emissions by controlling particulate matter emissions using either fabric filters or electrostatic precipitators, selective noncatalytic reduction (SNCR) for NO_x, and wet alkaline scrubber for SO₂. 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.

The semiannual 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 standard continue to operate the control equipment in compliance with the regulation. Adequate monitoring, recordkeeping, and reporting are necessary to ensure compliance with the applicable regulations, 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.

Public notice is given as part of the rulemaking process.

(c) Consultations.

During development of the proposed amendments, EPA held meetings and conference calls with representatives of the Portland Cement Association (PCA). More information is available in the docket for this rulemaking. We estimate that approximately 20 portland cement kilns will be replaced, reconstructed, or expanded over the next 5 years and will require additional testing which equates to 12 portland cement kilns over the next 3 years or 4 kilns per year (i.e., $12/3=4$).

(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.*

The required information has been determined not to be confidential. 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 (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 portland cement plants. The North American Industry Classification System (NAICS) code for respondents affected by the standards is 327310, Cement 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 Portland Cement Plants (40 CFR part 60, subpart F).

A source must make the following reports:

Reports for 40 CFR part 60, subpart F	
Notification of construction/reconstruction	60.7(a)(1)
Notification anticipated startup	60.7(a)(2)
Notification of actual startup.	60.7(a)(3)
Notification of demonstration of continuous monitoring system	60.7(a)(5)
Physical or operational change.	60.7(a)(4)
Initial performance test notice.	60.8(d)
Initial performance test results.	60.8(a)
Repeat performance test results.	60.64
Semi-annual malfunction report	60.7(b) and 60.65(c)
Semi-annual excess emission report	60.7(c) and 60.65(b)
Site-specific monitoring plan for bag leak detectors	60.63(f)(2)

A source must maintain the following records:

Recordkeeping for 40 CFR part 60, subpart F	
Startups, shutdowns, malfunctions, periods where the continuous monitoring system is inoperative.	60.7(b) and 60.65(c)
Records are required to be retained for two (2) years.	60.7(f)
Records of ongoing monitoring.	60.7(f)
Record daily production and kiln feed rates	60.63(a)
Records of exceedance	60.65(a) and (b)

Electronic Reporting

Currently, sources are using monitoring equipment that provides automated parameter data, e.g., continuous opacity 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 use electronic reporting.

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

Respondent Activities
Read instructions.
Install, calibrate, maintain, and operate SO ₂ and NO _x Continuous Emission Monitoring Systems (CEMS), flow meters, and bag leak detectors.
Perform initial Reference Methods 5 (particulate matter concentration) performance test, 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 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.

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.

Agency Activities
Observe initial performance tests and repeat performance tests, if necessary.
Review notifications and reports, including performance test reports, excess emissions reports, and site-specific monitoring plan required to be submitted by industry.

(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 semi-annual 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 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

There is a distribution of business sizes for the business that have portland cement plants. A majority of the affected plants are 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-d: Respondent Burden of Reporting and Recordkeeping Requirements, NSPS for Portland Cement Plants (40 CFR Part 60, Subpart F).

6. Estimating the Burden and Cost of the Collection

Tables 1a, 1b, and 1c [Year 1 Respondent Burden of Reporting and Recordkeeping Requirements, NSPS for Portland Cement Plants (40 CFR part 60, subpart F), Year 2 Respondent Burden of Reporting and Recordkeeping Requirements, NSPS for Portland Cement Plants (40 CFR part 60, subpart F), and Year 3 Respondent Burden of Reporting and Recordkeeping Requirements, NSPS for Portland Cement Plants (40 CFR part 60, subpart F)] document 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, 1b, and 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 4,428 hours per year (Total Labor Hours from Tables 1a, 1b, and 1c). 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, December 2007, "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 \$46.67 per hour for technical, \$51.81 per hour for managerial, and \$22.15 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 \$98.01, management at \$108.80, and clerical at \$46.52.

(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 CEMS, startup costs for bag leak detectors, and purchase file cabinets for keeping records. The rule will require an initial performance test for each new portland cement plant. The annual operation and maintenance costs are the ongoing costs to maintain the monitors and other costs such as photocopying and postage.

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 \$1,773,184. 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 recordation 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. Labor costs are not included in this section.

The annual average capital/startup costs for CEMS and BLDs that will be used to control NO_x, SO₂, and PM emissions is \$413,849 (costs derived from EPA Model) with an annual operations and maintenance costs of \$73,852.

All new portland cement plants are assumed to consist of kiln, clinker cooler, raw mill system, finish mill system, raw mill dryer, raw material storage, clinker storage, finished product storage, convey transfer points, and bagging and bulk loading and unloading systems. It is assumed that the 12 newly constructed portland cement kilns will be located at existing portland cement plants; and thus, no new plants will be constructed. In the future, the Agency assumes that no new COMS/Method 9 testing will be used. Fabric filter performance tests at portland cement plants include an initial Method 5 test. Method 5 testing is usually conducted by a contractor such that the cost of the emissions testing is a capital cost. A testing cost of \$7,000 for Method 5 tests (per baghouse) was used; however, a total testing cost of \$10,500 was used to cover the testing of 2 new baghouses (one on the kiln and one on the clinker cooler). It is assumed the contractor would test both new baghouses on the same day. It is anticipated that new kilns will use CEMS for compliance with the proposed new NO_x and SO₂ limits. Initial CEMS testing is usually conducted by an installation contractor such that the cost of the emissions testing is a capital cost. A testing costs of \$19,507 for each NO_x and SO₂ CEMS and \$8,090 for a flow meter (assumes one flow meter per stack). Note that there are no testing costs for BLDs. The anticipated number of new sources in this sector combined with the number of tests required for each type of model plant resulted in a total capital cost of approximately \$691,248 for Method 5 and CEMS testing over the next three years.

(iii) *Annualizing Capital Costs.* The annualized capital costs include the costs for one year (4 kilns) for Method 5 performance tests, CEMS, BLDs, flow meters, and file cabinets. The annualized capital costs for equipment associated with CEMS, BLDs, 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 \$59,035. The CEMS Monitoring Costs Spreadsheet can be found in the docket (See Section 6(g) for docket information).

(c) *Estimating Agency Burden and Cost.*

Table 2a: Year 1 Burden and Cost to the Agency—NSPS for Portland Cement Plants, Table 2b: Year 2 Burden and Cost to the Agency—NSPS for Portland Cement Plants, and Table 2c: and Year 3 Burden and Cost to the Agency—NSPS for Portland Cement Plants document the costs of this NSPS revision to the Agency. 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, 2b, and 2c. The average annual Agency cost during the three years of the ICR is estimated to be \$10,887.

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 2008-GS, available on the OPM website at http://www.opm.gov/oca/08tables/html/gs_h.asp. The government employee labor rates are \$14.96 per hour for clerical (GS-6, Step 3), \$27.65 for

technical (GS-12, Step 1), and \$37.27 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 \$23.94, technical at \$44.24, and managerial at \$59.63.

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

Approximately 118 portland cement plants are currently subject to the current regulation. It is estimated that an additional 12 newly constructed portland cement kilns located at existing portland cement plants will become subject to the proposed regulation in the next three years. Growth in this sector was estimated using data compiled by the Portland Cement Association showing capacity expansion estimates for the industry. Using this information it is estimated that an additional 20 new portland cement kilns will become subject to the regulation over the 5-year NSPS review period. Thus, it is estimated that an additional 12 portland cement kilns per year will become subject to the regulation over the three year ICR period ($20/5 \times 3 = 12$). All 20 new kilns are estimated to be newly constructed at existing portland cement plants.

The total annual number of responses for the monitoring, recordkeeping, and reporting requirements in subpart F is 108 for the additional 12 newly constructed portland cement kilns.

The total annual labor costs are \$416,179. Details upon which this estimate is based appear in Tables 1a, 1b, and 1c.

(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 41.0 hours per response.

(f) Reasons for Change in Burden.

The change in burden cost is due to these four reasons. First, it is estimated that 20 new kilns are projected to become subject to subpart F in the next 5 years. Second, new standards in subpart F require additional monitoring, reporting, and recordkeeping requirements. Third, the analysis for this ICR includes current rates for management, technical, and clerical staff. And fourth, Method 5 and initial CEMS performance testing were calculated as a capital cost because it is likely to be conducted by a contractor. Overall, these changes result in an increase in hourly burden and in increase in capital costs.

(g) *Burden Statement.*

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 41.0 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 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 final rule.

Table 1b. Year 2 Respondent Burden and Cost-NSPS for Portland Cement Plants (40 CFR part 60, subpart F)

	(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	4	4.0	0.2	0.4	\$432
B. Required Activities								
New Sources - Initial Performance Test (Reference Method 5)	36	1	36	4	144.0	7.2	14.4	\$15,566
New Sources - Repeat Performance Test (assumes only 1 source will repeat performance test)	36	1	36	1	36.0	1.8	3.6	\$3,892
New Sources - CEMS Initial Performance Test	8	1	8	4	32.0	1.6	3.2	\$3,459
New Sources - CEMS Monitoring	0.5	1	0.5	8	4.0	0.2	0.4	\$432
New Sources - CEMS Quarterly Inspections	2	4	8	8	64.0	3.2	6.4	\$6,918
New Sources - CEMS Daily Calibration Drift Tests	0.3	330	99	8	792.0	39.6	79.2	\$85,614
New Sources - BLD Quarterly (Seasonal) Adjustments	4	4	16	8	128.0	6.4	12.8	\$13,837
New Sources - Daily monitoring (CEMS and BLD)	0.5	330	165	8	1,320.0	66.0	132.0	\$142,690
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	4	8.0	0.4	0.8	\$865
New Sources - Notification of actual startup	2	1	2	4	8.0	0.4	0.8	\$865
New Sources - Physical or Operational Change	2	1	2	4	8.0	0.4	0.8	\$865
New Sources - Notification of Demonstration of CEMS	2	1	2	4	8.0	0.4	0.8	\$865
New Sources - Report of Performance Test (included in 4B)								
New Sources - Notification of Initial Performance Test	2	1	2	4	8.0	0.4	0.8	\$865
New Sources - Report of Performance Test	2	1	2	4	8.0	0.4	0.8	\$865

Table 1d. Summary of Respondent Burden and Cost-NSPS for Portland Cement Plants (40 CFR part 60, subpart F)

Year	Total annual labor burden (hours)	Total annual labor costs
1	2,531	\$237,925
2	4,428	\$416,179
3	6,324	\$594,434
Total	13,283	\$1,248,538
3-Year Average	4,428	\$416,179

Table 2a. Year 1 Burden and Cost to the Agency—NSPS for Portland Cement 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	24	1.2	0.24	\$1,139
Observe Repeat Performance Tests	24	0.2	4.8	1	4.8	0.2	0.05	\$228
Notification of construction/reconstruction commencement	2	1	2	4	8	0.4	0.08	\$380
Notification of actual startup	0.5	1	0.5	4	2	0.1	0.02	\$95
Notification of performance test	0.5	1.2	0.6	4	2.4	0.12	0.024	\$114
Notification of Physical or Operational Change	2	1	2	4	8	0.4	0.08	\$380
Review Test Results	8	1.2	9.6	4	38.4	1.92	0.384	\$1,823
Review BLD site specific monitoring plan	4	1.2	4.8	4	19.2	0.96	0.192	\$911
Review Semi-Annual reports	4	2	8	4	32	1.6	0.32	\$1,519
Total Annual Hours					139	6.9	1.39	\$6,588
						147	hours	
Travel Expenses								\$958
								\$7,546

a Assume agency personnel visit 1 new plant this year.

Travel Expenses = (1 person x 1 plant/year x 3 days/plant x \$117 per diem) + (\$608 round trip/plant x 1 plant/year) = \$958/year

Table 2b. Year 2 Burden and Cost to the Agency—NSPS for Portland Cement 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	24	1.2	0.24	\$1,139
Observe Repeat Performance Tests	24	0.2	4.8	1	4.8	0.2	0.05	\$228
Notification of construction/reconstruction commencement	2	1	2	4	8	0.4	0.08	\$380
Notification of actual startup	0.5	1	0.5	4	2	0.1	0.02	\$95
Notification of performance test	0.5	1.2	0.6	4	2.4	0.12	0.024	\$114
Notification of Physical or Operational Change	2	1	2	4	8	0.4	0.08	\$380
Review Test Results	8	1.2	9.6	8	76.8	3.84	0.768	\$3,645
Review BLD site specific monitoring plan	4	1.2	4.8	4	19.2	0.96	0.192	\$911
Review Semi-Annual reports	4	2	8	8	64	3.2	0.64	\$3,038
Total Annual Hours					209	10	2.09	\$9,929
						222	hours	
Travel Expenses								\$958
								\$10,887

a Assume agency personnel visit 1 plant this year.

b Assume 25% of initial performance tests (1 additional) must be repeated due to failure

Travel Expenses = (1 person x 1 plant/year x 3 days/plant x \$117 per diem) + (\$608 round trip/plant x 1 plant/year) = \$958/year

Table 2c. Year 3 Burden and Cost to the Agency—NSPS for Portland Cement 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	24	1.2	0.24	\$1,139
Observe Repeat Performance Tests	24	0.2	4.8	1	4.8	0.2	0.05	\$228
Notification of construction/reconstruction commencement	2	1	2	4	8	0.4	0.08	\$380
Notification of actual startup	0.5	1	0.5	4	2	0.1	0.02	\$95
Notification of performance test	0.5	1.2	0.6	4	2.4	0.1	0.024	\$114
Notification of Physical or Operational Change	2	1	2	4	8	0.4	0.08	\$380
Review Test Results	8	1.2	9.6	12	115.2	5.76	1.152	\$5,468
Review BLD site specific monitoring plan	4	1.2	4.8	4	19.2	0.96	0.192	\$911
Review Semi-Annual reports	4	2	8	12	96	4.8	0.96	\$4,556
Total Annual Hours					280	14.0	2.80	\$13,270
						296	hours	
Travel Expenses								\$958
								\$14,228

a Assume agency personnel visit 1 plant this year.

b Assume 25% of initial performance tests (1 additional) must be repeated due to failure

Travel Expenses = (1 person x 1 plant/year x 3 days/plant x \$117 per diem) + (\$608 round trip/plant x 1 plant/year) = \$958/year

Table 2d. Summary of Burden and Cost to the Agency—NSPS for Portland Cement Plants

Year	Total Annual Labor Burden (Hours)	Total Annual Costs
1	147	\$7,546
2	222	\$10,887
3	296	\$14,228
Total	665	\$32,661
3-Year Average	222	\$10,887