

INFORMATION COLLECTION REQUEST

SUPPORTING STATEMENT

NESHAP for Portland Cement Plants (40 CFR part 63, subpart LLL) (Final Rule)

August 2010

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 63, subpart LLL).” OMB has previously approved the information collection requirements for the existing rule. This is a revision to the existing approved information collection request (ICR). The OMB control number is 2060-0416 and the EPA ICR tracking number is 1801.09 for this revision.

(b) Short Characterization

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for the regulations published at 40 CFR part 63, subpart LLL were initially proposed on March 24, 1998, promulgated on June 14, 1999. Following a court-ordered remand, amendments were proposed on December 2, 2005 and a final rule issued on December 20, 2006 concurrently with a notice of reconsideration. Most recently, amendments were proposed on May 6, 2009. These regulations apply to the following affected sources at each new and existing portland cement plant that is a major or area source: each kiln, in-line kiln/raw mill and raw material dryer at these facilities, except for kilns and in-line kiln/raw mills that burn hazardous waste and are subject to 40 CFR 63, subpart EEE. In addition, the rule applies to each new and existing clinker cooler; raw mill; finish mill; raw material, clinker or finished product storage bin; conveying system transfer point; and bagging system and bulk loading and unloading system at facilities that are major or area sources. This information is being collected to assure compliance with 40 CFR part 63, subpart LLL.

In general, all NESHAP standards require initial notifications, performance tests, and periodic reports. These notifications, reports, and records are essential in determining compliance, and are required of all sources subject to the NESHAP.

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 five 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 portland cement manufacturing plants, except for kilns and in-line kiln/raw mills that burn hazardous waste and are subject to 40 CFR part 63, subpart EEE. The proposed amendments would establish or revise emission limits for total hydrocarbons (THC), mercury (Hg), and particulate matter (PM) for major and area sources and hydrogen chloride (HCl) for area sources. To demonstrate compliance with these emission limits, owners or operators of new, existing or reconstructed kilns subject to the standard would

be required to continuously monitor THC, Hg, PM and HCl. The exception is that kilns equipped with scrubbers can perform an initial Method 321 emission test and additional tests every 30 months and monitor scrubber parameters continuously. Respondents would be required to maintain additional records to demonstrate compliance with THC, Hg, HCl, and PM limits and notify EPA of performance tests. These requirements are listed in Exhibit 1.

Exhibit 1. Source Data and Information Requirements

Requirement	Regulation Citation	General Provision Citation	Record Retention
Notifications			
Anticipated startup	63.1353(b)(1)	63.9(b)(3)	5 years
Actual startup	63.1353(b)(1)	63.9(b)(4)	5 years
Performance test	63.1353(b)(2)	63.7 and 63.9(e)	5 years
CEM performance evaluation	63.1353(b)(4)	63.8(e)	5 years
Compliance status	63.1353(b)(5)	63.9(h)	5 years
Reports			
Performance test	63.1354(b)(1)	63.10(d)	5 years
Monitoring exceedance	63.1354(b)(8)-(10)	63.10(e)(5)	5 years
Recordkeeping			
Record retention	63.1355(a)	63.10(b)(1)	5 years
General NESHAP records	63.1355(b)(1)-(3)	63.10(b)(2)-(3)	5 years
CMS performance records	63.1355(c)	63.10(c)	5 years

Approximately 100 facilities with 140 non-hazardous sources are currently subject to the regulation, and it is estimated that 25 new sources will be built over the next five years or 16 additional sources will become subject to the regulation over the next three years.

2. Need for and Use of the Collection

(a) Need/Authority for the Collection

Section 112 of the CAA requires that EPA establish MACT standards for new or existing major or area sources according to the requirements in section 112(d). Certain records and reports are necessary for the Administrator to: (1) confirm the compliance status of major sources, identify any non-major sources not subject to the standards, and identify new or reconstructed sources subject to the standards; and (2) ensure that the MACT standards are being achieved on a continuous basis. These recordkeeping and reporting requirements are specifically authorized by section 114 of the Clean Air Act (42 U.S.C. 7414) and set out in the General Provisions for national emission standards for hazardous air pollutants (NESHAP) in 40 CFR part 63, subpart A.

(b) Use/Users of the Data

The additional information will be used by Agency enforcement personnel to ensure that the emission limitations are being achieved. Based on review of the recorded information at the site and the reported information, EPA can identify facilities that may not be in compliance and decide which plants, records, or processes should be inspected.

3. Nonduplication, Consultations, and Other Collection Criteria

(a) Nonduplication

No other regulation currently requires the same information requested under this ICR from owners or operators of portland cement plants. In the event that certain reports required by State or local agencies may duplicate information required by the proposed amendments, a copy of the report submitted to the State or local agency can be provided to the Administrator in lieu of the information that would be required in the semi-annual compliance report. Therefore, no duplication exists.

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

The preamble to final rule will provide public notice of this ICR.

(c) Consultations

We did not specifically consult with stakeholders on the ICR requirements of these proposed amendments. However, all the basic requirements in the proposed amendments exist in the current rule. Participants in the development process for the current rule included the Portland Cement Association (PCA) and Earth Justice on behalf of the Sierra Club. Several meetings and conference calls with industry and environmental representatives were held in the period leading to proposal.

(d) Effects of Less Frequent Collection

If the relevant information were collected less frequently, EPA would not be reasonably assured that a plant is in compliance with the standards.

(e) General Guidelines

None of the guidelines in 5 CFR 1320.5 are being exceeded.

(f) Confidentiality

All 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 01, 1976; amended by 43 FR 39999, September 28, 1978; 43 FR 42251, September 28, 1978; 44 FR 17674, March 23, 1979).

(g) Sensitive Questions

This section is not applicable because this ICR does not involve matters of a sensitive nature.

4. The Respondents and the Information Requested

(a) Respondents/NAICS Codes

In the proposed amendments, respondents are 100 owners or operators of existing portland cement manufacturing plants and any new portland cement plants. It is estimated that 25 new kilns located at an existing plants will be built over 5 years (or approximately 5 new kilns per year) after promulgation of the amendments. All respondents will be subject to the

monitoring, recordkeeping, and reporting requirements. The NAICS code for this industry is 327310, Cement Manufacturing.

(b) Information Requested

(i) Data Items, Including Recordkeeping Requirements.

Exhibit 1 (Source Data and Information Requirements) summarizes the final recordkeeping and reporting requirements.

(ii) Respondent Activities.

The respondent activities required by the final amendments are introduced in section 6(a).

(iii) Electronic Reporting.

EPA is proposing that portland cement plants have the option of submitting to an EPA electronic database an electronic copy of their required stack test. This electronic database should become available as of December 31, 2011. Currently, sources are using monitoring equipment that provides automated parameter data (e.g., continuous opacity monitoring). Although personnel at the affected facility must evaluate these 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 such data electronically which also reduces the reporting burden. It is estimated that approximately 10 percent of the respondents currently use electronic reporting.

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, and excess emissions reports, required to be submitted by industry.
Audit plant records.
Input, analyze, and maintain data in the AIRS Facility Subsystem (AFS) database.

(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 five years.

(c) Small Entity Flexibility

There is a distribution of business sizes for the business that operate 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. One consideration in the development of the proposed rule was that the size of the business does not necessarily correlate with emissions potential. Even a small entity can and does operate cement kilns that emit large quantities of HAP. 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-c and Exhibit 2: Respondent Burden of Reporting and Recordkeeping Requirements, NESHAP for Portland Cement Plants (40 CFR Part 63, Subpart LLL).

6. Estimating the Burden and Cost of the Collection

Tables 1a, 1b, and 1c 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. Exhibit 2 contains a summary of the respondent burden hours and costs detailed in Tables 1a, 1b, and 1c.

Exhibit 2. Summary of Respondent Burden

Year	Total Annual Labor Burden (hours)	Total Annual Labor Costs (\$)
1	104,859	9,838,323
2	63,062	6,724,853
3	71,451	6,703,811
Total	239,371	23,266,987
3-Year Average	79,790	7,755,662

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.

(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 79,790 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 NESHAP program, the previously approved ICR, and any comments received.

(b) Estimating Respondent Costs

Respondent costs are divided into four categories. These categories include labor costs, capital costs (includes startup costs), operations and maintenance costs, and annualized capital costs. The total respondent costs per kiln (\$720,915) have been calculated as the sum of the capital costs (including startup) (\$604,456) and the annual operation and maintenance costs (\$116,459).

(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, March 2010, "Table 2. Civilian Workers, by occupational and industry group," available at 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 \$46.29 per hour for technical, \$55.26 per hour for managerial, and \$23.27 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 \$97.21, management at \$116.05, and clerical at \$48.87.

(ii) Estimating Capital Costs

The capital costs associated with the information collection requirements will include the costs to conduct performance tests and startup costs for continuous emissions monitoring systems (CEMS). The rule will require an initial performance test for each portland cement plant.

The annual total capital (including startup) costs for CEMS that will be used to monitor THC, Hg, HCl, and PM (plus flow CEMS) is \$604,456 per kiln (costs derived from EPA's CEM.xls spreadsheet, Hg costs from 69FR4694, and Method 321 costs from EPA). The costs will be incurred for each year of the three-year period.

The continuous monitoring costs that are included in this section consist only of those capital 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 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.

All 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. In the future, the

Agency assumes that no new COMS/Method 9 testing will be used. Kilns equipped with scrubbers will conduct HCl performance tests using Method 321 test. Method 321 testing is usually conducted by a contractor and is treated as a capital cost. Facilities that are area sources are not subject to the HCl standard and will not incur testing or CEMS costs. A testing cost of \$20,000 for Method 321 tests was used. It is anticipated that new kilns will use CEMS for compliance with the proposed new or revised THC, Hg, HCl (or Method 321 for scrubber-equipped kilns), and PM emission 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 cost of \$131,222 per kiln for initial CEMS testing was used. The total costs for performance testing were calculated for this industry sector. The anticipated number of newly built kilns in this sector combined with the number of tests required for each source resulted in a total capital cost of approximately \$16,345,572 for Method 321 and CEMS testing over the next three years as shown in Exhibit 3.

Exhibit 3. Total Testing Costs by Year

Year	Method 321 (\$)	CEMS and Flow Meters (\$)
1	2,440,000	10,254,014
2	100,000	355,448
3	2,640,000	556,110
Total	5,180,000	11,165,572
Grand Total		16,345,572

(iii) Estimating Operations and Maintenance (O&M) Costs

The annual operation and maintenance costs are the ongoing costs to maintain the monitors and other costs such as photocopying and postage. The total annual O&M costs for CEMS that will be used to monitor THC, Hg, HCl and PM is \$116,459 per kiln per year (costs derived from EPA’s CEM.xls spreadsheet, Method 321 costs from EPA, and Hg costs from 69FR4694).

The continuous monitoring costs that are included in this section consist only of those 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 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.

(iv) Annualizing Capital Costs

The annualized capital costs include the costs for Method 321 performance tests and CEMS. The total annualized capital costs total \$61,959,961. A copy of the CEMS Monitoring Costs Spreadsheet can be found in the docket (See Section 6(g) for docket information).

(c) Estimating Agency Burden and Cost

Because the information collection requirements were developed as an incidental part of standards development, no costs can be attributed to the development of the information collection requirements. Because reporting and recordkeeping requirements on the part of the

respondents are required under the NESHAP General Provisions, no operational costs will be incurred by the Federal Government. Publication and distribution of the information are part of the Compliance Data System, with the result that no Federal costs can be directly attributed to the ICR. Examination of records to be maintained by the respondents will occur incidentally as part of the periodic inspection of sources that is part of EPA's overall compliance and enforcement program, and, therefore, is not attributable to the ICR. The only costs that the Federal government will incur are user costs associated with the analysis of the reported information, as presented in Tables 2a, 2b, and 2c. Exhibit 4 contains a summary of the agency burden costs and houses detailed in Tables 2a, 2b, and 2c. The average annual Agency costs during the three years of the ICR is estimated to be \$222,409.

Exhibit 4. Summary of the Agency Burden

Year	Total Annual Labor Burden (Hours)	Total Annual Costs (\$)
1	5,223	291,236
2	3,348	186,814
3	3,390	189,175
Total	11,961	667,226
3-Year Average	3,987	222,409

The Agency labor rates are from the Office of Personnel Management (OPM) 2003 General Schedule which excludes locality rates of pay. These rates can be obtained from Salary Table 2010-GS available on the OPM website (www.opm.gov/oca/10tables/html/gs_h.asp). The government employee labor rates are \$16.28/hour for clerical (GS-7, Step 1), \$34.34 for technical (GS-13, Step 1), and \$47.74/hr for management (GS-15, Step 1). 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 wage rates used to represent Agency labor costs are: clerical at \$26.05; technical at \$54.94, and management at \$76.38.

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

Approximately 100 portland cement plants are currently subject to the current regulation. 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 25 new portland cement kilns will become subject to the regulation over the 5-year NESHAP review period. Thus, it is estimated that an additional 16 portland cement kilns per year will become subject to the regulation over the three year ICR period. All 25 new kilns are estimated to be newly constructed at existing portland cement plants.

The total annual number of responses for the new monitoring, recordkeeping, and reporting requirements in subpart LLL is 1,503 for the existing 140 kilns that will follow the proposed amendments and the additional 16 newly constructed portland cement kilns.

(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 increased average annual burden for the proposed amendments is 51,548 person hours with an increased annual average cost of \$5,099,567 for technical, management, and clerical hours with annualized capital/startup and O&M cost of \$59,640,669.

(f) Reasons for Change in Burden.

The increase in burden is primarily due to the additional performance testing, monitoring, recordkeeping, and reporting costs attributable to the proposed amendments. It is also due to the use of more current labor rates for calculating the industry and Agency burden.

(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 53 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 currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR part 63 are listed in 40 CFR part 9.

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-2002-0051, 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-2002-0051 and OMB Control Number 2060-NEW in any correspondence.

PART B

This section is not applicable because statistical methods are not used in data collection associated with the final amendments.

Table 1a Year 1 Respondent Burden of Reporting and Recordkeeping Requirements, NESHAP for Portland Cement Plants (40 CFR part 63, subpart LLL)

Year 1		(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
1. APPLICATIONS (Not Applicable)									
2. SURVEY AND STUDIES (Not Applicable)									
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS		16	1	16	100	1,600.0	80.0	160.0	\$172,637
4. REPORT REQUIREMENTS									
A. Read Instructions									
	Existing Sources	1	1	1	100	100.0	5.0	10.0	\$10,790
	New Sources	1	1	1	5	5.0	0.3	0.5	\$539
B. Required Activities*									
	New Sources - Initial Performance Test	24	1	24	145	3,480.0	174.0	348.0	\$375,485
	New Sources - Reference Method 321 Test	8	1	8	122	976.0	48.8	97.6	\$105,308
	New Sources - Repeat Performance Test (assumes 10% repeat test)	24	1	24	14	336.0	16.8	33.6	\$36,254
	New Sources - Initial THC Performance Test	8	1	8	145	1,160.0	58.0	116.0	\$125,162
	New Sources - Repeat THC Performance Test	8	1	8	14	112.0	5.6	11.2	\$12,085
	New Sources - Initial Hg Performance Test**	40	1	40	145	5,800.0	290.0	580.0	\$625,808
	New Sources - Repeat Hg Performance Test**	8	1	8	14	112.0	5.6	11.2	\$12,085
	New Sources - Initial HCl Performance Test**	16	1	16	5	80.0	4.0	8.0	\$8,632
	New Sources - Repeat HCl Performance Test**	16	0.2	3.2	1	3.2	0.2	0.3	\$345
	New Sources -- Initial PM CEMS Performance Specification 11	40	1	40	145	5,800.0	290.0	580.0	\$625,808
	New Sources -- Repeat PM CEMS Performance Specification 11	40	0.2	8	14	112.0	5.6	11.2	\$12,085
	New Sources - CEMS Quarterly Inspections	2	4	8	145	1,160.0	58.0	116.0	\$125,162
	New Sources - CEMS Daily Calibration Drift Tests	0.3	330	99	145	14,355.0	717.8	1,435.5	\$1,548,876
	New Sources - Daily monitoring (CEMS)	0.3	330	99	145	14,355.0	717.8	1,435.5	\$1,548,876
	New Sources -- All CEMS must follow appropriate performance specifications	0.3	330	99	145	14,355.0	717.8	1,435.5	\$1,548,876
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	145	290.0	14.5	29.0	\$31,290
	New Sources - Notification of actual startup	2	1	2	145	290.0	14.5	29.0	\$31,290
	New Sources - Physical or Operational Change (assumes 10%)	2	1	2	14	28.0	1.4	2.8	\$3,021
	New Sources - Notification of Demonstration of CEMS	2	1	2	145	290.0	14.5	29.0	\$31,290
	New Sources - Report of Performance Test (included in 4B)								
	New Sources - Notification of Initial Performance Test	2	1	2	145	290.0	14.5	29.0	\$31,290
	New Sources - Report of Performance Test	2	1	2	145	290.0	14.5	29.0	\$31,290
	New Sources - Report of Semi-Annual Reports	24	2	48	100	4,800.0	240.0	480.0	\$517,910

Year 1	(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
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)								
E. Time to Transmit or Disclose Information								
New Sources - Data Collection**	0.1	330	33	145	4,785.0	239.3	478.5	\$516,292
New Sources - Records of Startups, Shutdowns, malfunctions, etc**	1.5	1	1.5	145	217.5	10.9	21.8	\$23,468
F. Time to Train Personnel***	80	2	160	100	16,000.0	800.0	1,600.0	\$1,726,368
G. Time for Audits (Not Applicable)								
TOTAL ANNUAL LABOR BURDEN AND COST		1347.4		2,778	91,182	4,559	9,118	\$ 9,838,323
						104,859	Hours	
ANNUAL CAPITAL COSTS								
Performance tests								\$15,606,542
Other Capital Costs of Installation (ODC and Labor)								\$70,931,247
Total annual capital								\$86,537,789
ANNUALIZED CAPITAL COSTS								
Total annualized capital								\$173,075,578
TOTAL ANNUAL COSTS (O&M)								
								\$211,982
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								
								\$173,287,560

*Includes 140 existing sources that must comply with the new regulations

**Includes 140 existing sources that must comply with the new regulations and 5 new anticipated sources.

***Includes 64 hours of PM CEMS training.

Table 1b Year 2 Respondent Burden of Reporting and Recordkeeping Requirements, NESHAP for Portland Cement Plants (40 CFR part 63, subpart LLL)

Year 2	(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
1. APPLICATIONS (Not Applicable)								
2. SURVEY AND STUDIES (Not Applicable)								
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS -- New Sources	16	1	16	15	240.0	12.0	24.0	\$25,896
4. REPORT REQUIREMENTS								
A. Read Instructions								
New Sources	1	1	1	15	15.0	0.8	1.5	\$1,618
B. Required Activities								
Existing Sources - Initial Performance Test*	24	1	24	10	240.0	12.0	24.0	\$25,896
Existing Sources - Reference Method 321 Test*	8	1	8	10	80.0	4.0	8.0	\$8,632
Existing Sources - Repeat Performance Test*	24	1	24	1	24.0	1.2	2.4	\$2,590
Existing Sources - Initial THC Performance Test*	8	1	8	10	80.0	4.0	8.0	\$8,632
Existing Sources - Repeat THC Performance Test*	8	1	8	1	8.0	0.4	0.8	\$863
Existing Sources - Initial Hg Performance Test*	40	1	40	10	400.0	20.0	40.0	\$43,159
Existing Sources - Repeat Hg Performance Test*	8	1	8	1	8.0	0.4	0.8	\$863
Existing Sources - Initial HCl Performance Test*	16	1	16	10	160.0	8.0	16.0	\$17,264
Existing Sources - Repeat HCl Performance Test*	16	0.2	3.2	1	3.2	0.2	0.3	\$345
Existing Sources -- Initial PM CEMS Performance Specification 11	40	0.2	8	10	80.0	4.0	8.0	\$8,632
Existing Sources -- Repeat PM CEMS Performance Specification 11	40	0.2	8	1	8.0	0.4	0.8	\$863
Existing Sources - CEMS Monitoring*	0.5	1	0.5	145	72.5	3.6	7.3	\$7,823
Existing Sources - CEMS Quarterly Inspections*	2	4	8	145	1,160.0	58.0	116.0	\$125,162
Existing Sources - CEMS Daily Calibration Drift Tests*	0.3	330	99	145	14,355.0	717.8	1,435.5	\$1,548,876
Existing Sources - Daily monitoring (CEMS)*	2	4	8	145	1,160.0	58.0	116.0	\$125,162
Existing Sources -- All CEMS must follow appropriate performance specifications*	0.3	330	99	145	14,355.0	717.8	1,435.5	\$1,548,876
New Sources - Initial Performance Test	0.3	330	99	5	495.0	24.8	49.5	\$53,410
New Sources - Reference Method 321 Test	8	1	8	5	40.0	2.0	4.0	\$4,316
New Sources - Repeat Performance Test	8	1	8	1	4.0	0.2	0.4	\$432
New Sources - Initial THC Performance Test	24	1	24	5	120.0	6.0	12.0	\$12,948
New Sources - Repeat THC Performance Test	8	1	8	1	4.0	0.2	0.4	\$432
New Sources - Initial Hg Performance Test	8	1	8	5	40.0	2.0	4.0	\$4,316
New Sources - Repeat Hg Performance Test	40	1	40	1	20.0	1.0	2.0	\$2,158
New Sources - Initial HCl Performance Test	0	0	0	5	-	-	-	\$0
New Sources - Repeat HCl Performance Test	16	1	16	1	8.0	0.4	0.8	\$863
New Sources -- Initial PM CEMS Performance Specification 11	16	0.2	3.2	5	16.0	0.8	1.6	\$1,726
New Sources -- Repeat PM CEMS Performance Specification 11	40	1	40	1	20.0	1.0	2.0	\$2,158
New Sources - CEMS Monitoring	40	0.2	8	5	40.0	2.0	4.0	\$4,316
New Sources - CEMS Quarterly Inspections	0.5	1	0.5	5	2.5	0.1	0.3	\$270
New Sources - CEMS Daily Calibration Drift Tests	2	4	8	5	40.0	2.0	4.0	\$4,316
New Sources - Daily monitoring (CEMS)	2	4	8	5	40.0	2.0	4.0	\$4,316
New Sources -- All CEMS must follow appropriate performance specifications	0.3	330	99	5	495.0	24.8	49.5	\$53,410
C. Create Information (Included in 4B)					-	-	-	

Year 2		(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
	D. Gather Existing Information (Included in 4E)								
	E. Write Report								
	Existing Sources - Notification of construction/reconstruction *	2	1	2	10	20	200	4000	800000
	Existing Sources - Notification of actual startup*	2	1	2	10	20	200	4000	800000
	Existing Sources - Physical or Operational Change*	2	1	2	10	20.0	1.0	2.0	\$2,158
	Existing Sources - Notification of Demonstration of CEMS*	2	1	2	10	20.0	1.0	2.0	\$2,158
	Existing Sources - Report of Performance Test (included in 4B)								
	Existing Sources - Notification of Initial Performance Test*	2	1	2	11	22.0	1.1	2.2	\$2,374
	Existing Sources - Report of Performance Test*	2	1	2	145	290.0	14.5	29.0	\$31,290
	Existing Sources - Report of Semi-Annual Reports*	2	2	4	100	400.0	20.0	40.0	\$43,159
	New Sources - Notification of construction/reconstruction	2	1	2	5	10.0	0.5	1.0	\$1,079
	New Sources - Notification of actual startup	2	1	2	5	10.0	0.5	1.0	\$1,079
	New Sources - Physical or Operational Change	2	1	2	5	10.0	0.5	1.0	\$1,079
	New Sources - Notification of Demonstration of CEMS	2	1	2	5	10.0	0.5	1.0	\$1,079
	New Sources - Report of Performance Test (included in 4B)								
	New Sources - Notification of Initial Performance Test	2	1	2	6	12.0	0.6	1.2	\$1,295
	New Sources - Report of Performance Test	2	1	2	5	10.0	0.5	1.0	\$1,079
	New Sources - Report of Semi-Annual Reports	24	2	48	5	240.0	12.0	24.0	\$25,896
	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)								
	E. Time to Transmit or Disclose Information								
	Existing Sources - Data Collection	0.1	330	33	145	4,785.0	239.3	478.5	\$516,292
	Existing Sources - Records of Startups, Shutdowns, malfunctions, etc	0.1	330	33	145	4,785.0	239.3	478.5	\$516,292
	New Sources - Data Collection	1.5	330	495	5	2,475.0	123.8	247.5	\$267,048
	New Sources - Records of Startups, Shutdowns, malfunctions, etc	0.1	330	33	5	165.0	8.3	16.5	\$17,803
	F. Time to Train Personnel	80	1	80	5	400.0	20.0	40.0	\$43,159
	G. Time for Audits (Not Applicable)								
	TOTAL ANNUAL LABOR BURDEN AND COST								
			2,694		1,515	47,537	2,775	12,750	\$ 6,724,853
	ANNUAL CAPITAL COSTS						63,062	Hours	
	Performance tests								
	Other Capital Costs of Installation (ODC and Labor)								\$455,448
	Total annual capital								\$673,628
	ANNUALIZED CAPITAL COSTS								\$ 1,129,075
	Total annualized capital								\$ 2,258,151
	TOTAL ANNUAL COSTS (O&M)								\$ 2,258,151
	TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								\$211,982
									\$ 2,470,132

*Assumes that 10% of the 100 facilities (10 facilities) will have new construction/reconstruction and will be required to complete performance tests and new/revised reports.

Table 1c Year 3 Respondent Burden of Reporting and Recordkeeping Requirements, NESHAP for Portland Cement Plants (40 CFR part 63, subpart LLL)]

Year 3	(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
1. APPLICATIONS (Not Applicable)								
2. SURVEY AND STUDIES (Not Applicable)								
3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS -- New Sources	16	1	16	15	240.0	12.0	24.0	\$25,896
4. REPORT REQUIREMENTS								
A. Read Instructions								
New Sources	1	1	1	15	15.0	0.8	1.5	\$1,618
B. Required Activities				0	-	-	-	\$0
Existing Sources - Initial Performance Test*	24	1	24	15	360.0	18.0	36.0	\$38,843
Existing Sources -- 30 Month Method 321 repeat test	8	1	8	127	1,016.0	50.8	101.6	\$109,624
Existing Sources - Repeat Performance Test*	24	1	24	2	36.0	1.8	3.6	\$3,884
Existing Sources - Initial THC Performance Test*	8	1	8	15	120.0	6.0	12.0	\$12,948
Existing Sources - Repeat THC Performance Test*	8	1	8	2	12.0	0.6	1.2	\$1,295
Existing Sources - Initial Hg Performance Test*	40	1	40	15	600.0	30.0	60.0	\$64,739
Existing Sources - Repeat Hg Performance Test*	8	1	8	2	12.0	0.6	1.2	\$1,295
Existing Sources - Initial HCl Performance Test*	16	1	16	15	240.0	12.0	24.0	\$25,896
Existing Sources - Repeat HCl Performance Test*	16	0.2	3.2	2	4.8	0.2	0.5	\$518
Existing Sources - CEMS Monitoring*	0.5	1	0.5	150	75.0	3.8	7.5	\$8,092
Existing Sources - CEMS Quarterly Inspections*	2	4	8	150	1,200.0	60.0	120.0	\$129,478
Existing Sources - CEMS Daily Calibration Drift Tests*	0.3	330	99	150	14,850.0	742.5	1,485.0	\$1,602,285
Existing Sources - Daily monitoring (CEMS)*	0.3	330	99	150	14,850.0	742.5	1,485.0	\$1,602,285
Existing Sources -- All CEMS must follow appropriate performance specifications*	0.3	330	99	150	14,850.0	742.5	1,485.0	\$1,602,285
New Sources - Initial Performance Test	24	1	24	5	120.0	6.0	12.0	\$12,948
New Sources - Method 321 Test								
New Sources - Repeat Performance Test	24	1	24	1	24.0	1.2	2.4	\$2,590
New Sources - Initial THC Performance Test	8	1	8	5	40.0	2.0	4.0	\$4,316
New Sources - Repeat THC Performance Test	8	1	8	1	8.0	0.4	0.8	\$863
New Sources - Initial Hg Performance Test	40	1	40	5	200.0	10.0	20.0	\$21,580
New Sources - Repeat Hg Performance Test	0	0	0	1	-	-	-	\$0
New Sources - Initial HCl Performance Test	16	1	16	5	80.0	4.0	8.0	\$8,632
New Sources - Repeat HCl Performance Test	16	0.2	3.2	1	3.2	0.2	0.3	\$345
New Sources - CEMS Monitoring	0.5	1	0.5	5	2.5	0.1	0.3	\$270
New Sources - CEMS Quarterly Inspections	2	4	8	5	40.0	2.0	4.0	\$4,316
New Sources - CEMS Daily Calibration Drift Tests	0.3	330	99	5	495.0	24.8	49.5	\$53,410
New Sources - Daily monitoring (CEMS)	0.3	330	99	5	495.0	24.8	49.5	\$53,410
New Sources -- All CEMS must follow appropriate performance specifications	0.3	330	99	5	495.0	24.8	49.5	\$53,410
C. Create Information (Included in 4B)								
D. Gather Existing Information (Included in 4E)								
E. Write Report								
Existing Sources - Notification of construction/reconstruction*	2	1	2	10	20.0	1.0	2.0	\$2,158
Existing Sources - Notification of actual startup*	2	1	2	10	20.0	1.0	2.0	\$2,158
Existing Sources - Physical or Operational Change*	2	1	2	10	20.0	1.0	2.0	\$2,158

Year 3		(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
	Existing Sources - Notification of Demonstration of CEMS*	2	1	2	10	20.0	1.0	2.0	\$2,158
	Existing Sources - Report of Performance Test (included in 4B)*								
	Existing Sources - Notification of Initial Performance Test*	2	1	2	10	20.0	1.0	2.0	\$2,158
	Existing Sources - Report of Performance Test*	2	1	2	150	300.0	15.0	30.0	\$32,369
	Existing Sources - Report of Semi-Annual Reports*	24	2	48	100	4,800.0	240.0	480.0	\$517,910
	New Sources - Notification of construction/reconstruction	2	1	2	5	10.0	0.5	1.0	\$1,079
	New Sources - Notification of actual startup	2	1	2	5	10.0	0.5	1.0	\$1,079
	New Sources - Physical or Operational Change	2	1	2	5	10.0	0.5	1.0	\$1,079
	New Sources - Notification of Demonstration of CEMS	2	1	2	5	10.0	0.5	1.0	\$1,079
	New Sources - Report of Performance Test (included in 4B)								
	New Sources - Notification of Initial Performance Test	2	1	2	5	10.0	0.5	1.0	\$1,079
	New Sources - Report of Performance Test	2	1	2	5	10.0	0.5	1.0	\$1,079
	New Sources - Report of Semi-Annual Reports	24	2	48	5	240.0	12.0	24.0	\$25,896
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)								
	E. Time to Transmit or Disclose Information								
	Existing Sources - Data Collection	0.1	330	33	150	4,950.0	247.5	495.0	\$534,095
	Existing Sources - Records of Startups, Shutdowns, malfunctions, etc	1.5	1	1.5	150	225.0	11.3	22.5	\$24,277
	New Sources - Data Collection	0.1	330	33	5	165.0	8.3	16.5	\$17,803
	New Sources - Records of Startups, Shutdowns, malfunctions, etc	1.5	1	1.5	5	7.5	0.4	0.8	\$809
	F. Time to Train Personnel	80	2	160	5	800.0	40.0	80.0	\$86,318
	G. Time for Audits (Not Applicable)								
TOTAL ANNUAL LABOR BURDEN AND COST			2686.4		1,672	62,131	3,107	6,213	\$ 6,703,811
							71,451	Hours	
ANNUAL CAPITAL COSTS									
	Performance tests								\$ 3,196,110
	Other Capital Costs of Installation (ODC and Labor)								\$ 1,788,100
	Total annual capital								\$ 4,984,209
ANNUALIZED CAPITAL COSTS									
	Total annualized capital								\$ 9,968,419
TOTAL ANNUAL COSTS (O&M)									
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)									
									\$ 10,122,189

*Assumes that 10% of the 100 facilities (10 facilities) will have new construction/reconstruction and will be required to complete performance tests and new/revised reports.

Table 2a Year 1 Agency Burden and Cost, NESHAP for Portland Cement Plants (40 CFR part 63, subpart LLL)]

Activity -- Year 1	(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	24.0	1.2	0.2	\$ 1,417
Observe Repeat Performance Tests	24	0.2	4.8	1	4.8	0.2	0.0	\$283
Notification of construction/reconstruction commencement	0.5	1	0.5	14	7.2	0.4	0.1	\$427
Notification of actual startup	0.5	14	7	145	1015.0	50.8	10.2	\$59,909
Notification of performance test	0.5	14	7	145	1015.0	50.8	10.2	\$59,909
Notification of Physical or Operational Change	0.5	14	7	14	101.4	5.1	1.0	\$ 5,985
Review Test/CEMS Results	8	1	8	145	1160.0	58.0	11.6	\$68,467
Review Semi-Annual reports	8	2	16	100	1600.0	80.0	16.0	\$94,438
Total Annual Hours					4927.4	246.4	49.3	\$290,836
						5,223.09	hours	
Travel Expenses								\$400
								\$291,236

Travel Expenses = (1 person x 1 plant/year x 3 days/plant x \$50 per diem) + (\$250 round trip/plant x 1 plant/year) = \$400/year

Assumes EPA will visit 1 plant per year

Performance test assumes 10% failure rate or 1 extra plant

Assumes that 10% of the 100 facilities (10 facilities) will have new construction/reconstruction and will be required to complete performance tests and new/revised reports.

Table 2bYear 2 Agency Burden and Cost, NESHAP for Portland Cement Plants (40 CFR part 63, subpart LLL)]

Activity -- Year 2	(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	24.0	1.2	0.2	\$1,417
Observe Repeat Performance Tests	24	0.2	4.8	1	4.8	0.2	0.0	\$283
Notification of construction/reconstruction commencement	0.5	1	0.5	15	7.5	0.4	0.1	\$443
Notification of actual startup	0.5	14	7	15	105.0	5.3	1.1	\$6,197
Notification of performance test	0.5	14	7	16	112.0	5.6	1.1	\$6,611
Notification of Physical or Operational Change	0.5	14	7	15	105.0	5.3	1.1	\$6,197
Review Test/CEMS Results	8	1	8	150	1200.0	60.0	12.0	\$70,828
Review Semi-Annual reports	8	2	16	100	1600.0	80.0	16.0	\$94,438
Total Annual Hours					3158.3	157.9	31.6	\$186,414
						3,347.80	hours	
Travel Expenses								\$400
								\$186,814

Travel Expenses = (1 person x 1 plant/year x 3 days/plant x \$50 per diem) + (\$250 round trip/plant x 1 plants/year) = \$400/year

Assumes EPA will visit 1 plant per year

Performance test assumes 10% failure rate or 1 extra plant

Assumes that 10% of the 100 facilities (10 facilities) will have new construction/reconstruction and will be required to complete performance tests and new/revised reports.

Table 2c Year 3 Agency Burden and Cost, NESHAP for Portland Cement Plants (40 CFR part 63, subpart LLL)]

Activity -- Year 3	(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	24.0	1.2	0.2	\$1,417
Observe Repeat Performance Tests	24	0.2	4.8	1	4.8	0.2	0.0	\$283
Notification of construction/reconstruction commencement	0.5	1	0.5	15	7.5	0.4	0.1	\$443
Notification of actual startup	0.5	14	7	15	105.0	5.3	1.1	\$6,197
Notification of performance test	0.5	14	7	16	112.0	5.6	1.1	\$6,611
Notification of Physical or Operational Change	0.5	14	7	15	105.0	5.3	1.1	\$6,197
Review Test Results	8	1	8	155	1240.0	62.0	12.4	\$73,189
Review Semi-Annual reports	8	2	16	100	1600.0	80.0	16.0	\$94,438
Total Annual Hours					3198.3	159.9	32.0	\$188,775
						3,390.20	hours	
Travel Expenses								\$400
								\$189,175

Travel Expenses = (1 person x 1 plant/year x 3 days/plant x \$50 per diem) + (\$250 round trip/plant x 1 plants/year) = \$400/year

Assumes EPA will visit 1 plant per year

Performance test assumes 10% failure rate or 1 extra plant

Assumes that 10% of the 93 facilities (9 facilities) will have new construction/reconstruction and will be required to complete performance tests and new/revised reports.