**SUPPORTING STATEMENT**

**ENVIRONMENTAL PROTECTION AGENCY**

**NESHAP for Portland Cement Plants (40 CFR Part 63, Subpart LLL) (Renewal)**

**1. Identification of the Information Collection**

**1(a) Title of the Information Collection**

NESHAP for Portland Cement Plants (40 CFR Part 63, Subpart LLL) (Renewal), EPA ICR Number 1801.12, OMB Control Number 2060-0416.

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

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Portland Cement Plants (40 CFR Part 63, Subpart LLL) were initially proposed on March 24, 1998, and 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. Additional amendments were finalized on: September 9, 2010; February 12, 2013; July 27, 2015; and September 11, 2015. The 2015 amendment removed the affirmative defense provision, but did not affect the pollution reduction or cost associated with the rule.

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 Part 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 notification reports, performance tests, and periodic reports by the owners/operators of the affected facilities. They are also required to maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility, or any period during which the monitoring system is inoperative. These notifications, reports, and records are essential in determining compliance, and are required of all affected facilities subject to NESHAP.

Any owner/operator subject to the provisions of this part shall maintain a file containing these documents, and retain the file for at least five years following the generation date of such 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 U.S. 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 “burden” to the “Affected Public” may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Portland Cement Plants (40 CFR Part 63, Subpart LLL) (Renewal). The “burden” to the Federal Government is attributed entirely to work performed by either Federal employees or government contractors, and can be found below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Portland Cement Plants (40 CFR Part 63, Subpart LLL) (Renewal).

Over the next three years, approximately 87 Portland cement plants with 138 non-hazardous waste cement kilns are subject to the regulation. It is estimated that 25 new kilns will be built over the next five years or 5 additional sources per year that will become subject to the regulation. All 25 new kilns are estimated to be newly constructed at existing Portland cement plants. Since the records and reports are maintained at the plant-level, the estimate for the number of respondents to this ICR is tracked at the plant-level. Although there are new kilns estimated at existing plants, there are no new respondents estimated during this ICR.

The Office of Management and Budget (OMB) approved the currently active ICR without any “Terms of Clearance”.

**2. Need for and Use of the Collection**

**2(a) Need/Authority for the Collection**

The EPA is charged under Section 112 of the Clean Air Act, as amended, to establish standards of performance for each category or subcategory of major sources and area sources of hazardous air pollutants. These standards are applicable to new or existing sources of hazardous air pollutants and shall require the maximum degree of emission reduction.

In addition, section 114(a) states that the Administrator may require any owner/operator subject to any requirement of this Act to:

(A) Establish and maintain such records; (B) make such reports; (C) install, use, and maintain such monitoring equipment, and use such audit procedures, or methods; (D) sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods, and in such manner as the Administrator shall prescribe); (E) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; (F) submit compliance certifications in accordance with Section 114(a)(3); and (G) provide such other information as the Administrator may reasonably require.

In the Administrator's judgment, hazardous air pollutant (HAP) emissions from Portland cement manufacturing facilities either cause or contribute to air pollution that may reasonably be anticipated to endanger public health and/or welfare. Therefore, the NESHAP were promulgated for this source category at 40 CFR Part 63,Subpart LLL.

**2(b) Practical Utility/Users of the Data**

The control of HAP emissions from Portland cement manufacturing facilities requires not only the installation of properly designed equipment, but also the operation and maintenance of that equipment. Emissions of HAPs from Portland cement manufacturing facilities are the result of operation of the affected facilities. The subject standards are achieved by the capture of particulate HAP emissions using fabric filters or electrostatic precipitators control, temperature control for the reduction of dioxins and furans (D/F), and feed selection for reduction of other organic HAP.

The recordkeeping and reporting requirements in the standards ensure compliance with the applicable regulations which were promulgated in accordance with the Clean Air Act. The collected information is also used for targeting inspections and as evidence in legal proceedings.

Performance tests are required in order to determine an affected facility’s initial capability to comply with the emission standards. Continuous emission monitors are used to ensure compliance with these standards at all times. During the performance test a record of the operating parameters under which compliance was achieved may be recorded and used to determine compliance in place of a continuous emission monitor.

The notifications required in the standards 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, leaks are being detected and repaired, and that the standards are being met. The performance test may also be observed.

The required semiannual reports are used to determine periods of excess emissions, identify problems at the facility, verify operation/maintenance procedures and for compliance determinations.

**3. Non-duplication, Consultations, and Other Collection Criteria**

The requested recordkeeping and reporting are required under 40 CFR Part 63, Subpart LLL.

**3(a) Non-duplication**

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 its 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, duplication does not exist.

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

An announcement of a public comment period for the renewal of this ICR was published in the Federal Register (80 FR 32120) on June 5, 2015. No comments were received on the burden published in the Federal Register.

**3(c) Consultations**

The Agency has consulted industry experts and internal data sources to project the number of affected facilities and industry growth over the next three years.The primary source of information as reported by industry, in compliance with the recordkeeping and reporting provisions in the standards, is the Integrated Compliance Information System (ICIS). ICIS is EPA’s database for the collection, maintenance, and retrieval of compliance data for industrial and government-owned facilities. The growth rate for the industry is based on our consultations with the Agency’s internal industry experts. Approximately 87 respondents will be subject to the standard over the three-year period covered by this ICR.

Industry trade associations and other interested parties were provided an opportunity to comment on the burden associated with the standards as they were being developed and these same standards have been reviewed previously to determine the minimum information needed for compliance purposes. In developing this ICR, we contacted both the Portland Cement Association, at (202)408-9494; and the National Ready Mixed Concrete Association, at (240)485-1156.

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

**3(d) Effects of Less Frequent Collection**

Less-frequent information collection would decrease the margin of assurance that facilities are continuing to meet 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 proper operation and maintenance of control equipment and the possibility of detecting violations would be less likely.

**3(e) General Guidelines**

These reporting or recordkeeping requirements do not violate any of the regulations promulgated by OMB under 5 CFR Part 1320, Section 1320.5.

These standards require the respondents to maintain all records, including reports and notifications for at least five years. This is consistent with the General Provisions as applied to the standards. EPA believes that the five-year records retention requirement is consistent with the Part 70 permit program and the five-year statute of limitations on which the permit program is based. The retention of records for five years allows EPA to establish the compliance history of a source, any pattern of non-compliance and to determine the appropriate level of enforcement action. EPA has found that the most flagrant violators have violations extending beyond five years. In addition, EPA would be prevented from pursuing the violators due to the destruction or nonexistence of essential records.

**3(f) Confidentiality**

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

**3(g) Sensitive Questions**

The reporting or recordkeeping requirements in the standard do not include sensitive questions.

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

**4(a) Respondents/SIC Codes**

The respondents to the recordkeeping and reporting requirements are Portland cement manufacturing facilities. The United States Standard Industrial Classification (SIC) code for the respondents affected by the standards is SIC 3241, which corresponds to the North American Industry Classification System (NAICS) code 32731 for Portland cement manufacturing facilities.

**4(b) Information Requested**

**(i) Data Items**

In this ICR, all the data that is recorded or reported is required by the NESHAP for the Portland Cement Manufacturing Industry (40 CFR Part 63, Subpart LLL).

A source must make the following reports:

| **Notifications** | |
| --- | --- |
| Notification of anticipated startup | 63.1353(b)(1), 63.9(b)(3) |
| Notification of applicability | 63.9(b)(1&2) |
| Notification of actual startup | 63.1353(b)(1), 63.9(b)(4) |
| Notification of construction/reconstruction | 63.9(b)(5) |
| Request for extension of compliance | 63.9(c) |
| Notification of special compliance requirements | 63.9(d) |
| Notification of initial performance test | 63.1353(b)(2), 63.9(e), 63.7(b) |
| Notification of opacity and visible emission observations | 63.9(f) |
| Notification of the continuous emission monitoring performance evaluation | 63.1353(b)(4), 63.8(e), 63.9(g) |
| Notification of compliance status | 63.1353(b)(5), 63.9(h) |
| Adjustments to time periods or postmark deadlines for submittal and review of required communications | 63.9(i) |
| Change in information already provided | 63.9(j) |

| **Reports** | |
| --- | --- |
| Operations and maintenance plan | 63.1350(a) |
| Report of performance test | 63.1354(b)(1), 63.10(d)(2) |
| Opacity and visual emission observation | 63.10(d)(3) |
| Progress reports | 63.10(d)(4) |
| Periodic startup, shutdown, malfunction reports | 63.10(d)(5)(i) |
| Immediate startup, shutdown, malfunction reports | 63.10(d)(5)(ii) |
| Reporting results of continuous monitoring system performance evaluations | 63.10(e)(2) |
| Excess emissions and continuous monitoring system performance report and summary report | 63.10(e)(3) |
| Reporting continuous opacity monitoring system data produced during a performance test | 63.10(e)(4) |
| Reporting monitoring exceedance | 63.1354(b)(8)-(10), 63.10(e)(5) |
| Waiver of recordkeeping and reporting requirements | 63.10(f) |

A source must keep the following records:

| **Recordkeeping** | |
| --- | --- |
| All reports and notifications | 63.1355(b)(1)-(3), 63.10(b) |
| Startups, shutdowns, malfunctions, periods where the continuous monitoring system is inoperative | 63.10(b)(2) |
| Record of applicability | 63.10(b)(3) |
| Records for sources with continuous monitoring systems | 63.1355(c), 63.10(c) |
| Records for cement dust kilns (CDK) | 63.1355(d) |
| Operation and Maintenance Plan | 63.1346(f), 63.1343(c), 63.6(e) |
| Records are required to be retained for five (5) years. The first two (2) years of records must be retained at the facility. | 63.1355(a), 63.10(b)(1) |

Electronic Reporting

Some of the respondents are using monitoring equipment that automatically records parameter data. Although personnel at the affected facility must still evaluate the data, internal automation has significantly reduced the burden associated with monitoring and recordkeeping at a plant site.

**(ii) Respondent Activities**

| **Respondent Activities** |
| --- |
| Familiarization with the regulatory requirements. |
| Install, calibrate, maintain, and operate CMS for: 1) opacity; 2) to record the temperature of the exhaust gases to monitor D/F; 3) to record the rate of carbon injection and the carrier gas parameter, if using activated carbon injection to control D/F; and 4) to measure Total Hydrocarbons (THC), if applicable. |
| Perform initial performance test, Reference Method 5 test for Particulates, Method 9 test for Opacity, Method 23 test for dioxin/furans (D/F), and Performance Specification 8A of Appendix B to Part 60 for THC, Method 25A test for THC, Method 321 test for HCL, Method 30B test for Hg, if applicable. 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. |
| Train personnel to be able to respond to a collection of information. |
| Transmit, or otherwise disclose the information. |

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

**5(a) Agency Activities**

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

| **Agency Activities** |
| --- |
| Observe initial performance tests and repeat performance tests, if necessary. |
| Review notifications and reports, including performance test reports, and excess emissions reports, required to be submitted by industry. |
| Audit facility records. |
| Input, analyze, and maintain data in the Enforcement and Compliance History Online (ECHO) and ICIS. |

**5(b) Collection Methodology and Management**

Following notification of startup, the reviewing authority could inspect the source to determine whether the pollution control devices are properly installed and operated. Performance test reports are used by the Agency to discern a source’s initial capability to comply with the emission standard. Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs. The semiannual reports are used for problem identification, as a check on source operation and maintenance, and for compliance determinations.

Information contained in the reports is reported by state and local governments in the ICIS Air database, which is operated and maintained by EPA's Office of Compliance. ICIS is EPA’s database for the collection, maintenance, and retrieval of compliance data for industrial and government-owned facilities. EPA uses ICIS 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/operator for five years.

**5(c) Small Entity Flexibility**

There is a distribution of business sizes for the business that operate Portland cement plants. A majority of the respondents are large entities (i.e., large businesses). However, the impact on small entities (i.e., small businesses) was taken into consideration during the development of the regulation. One consideration in the development of the final 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 operations and the types of control equipment employed, the recordkeeping and reporting requirements are the same for both small and large entities. The Agency considers these to be the minimum requirements needed to ensure compliance and, therefore, cannot reduce them further for small entities. To the extent that larger businesses can use economies of scale to reduce their burden, the overall burden will be reduced.

**5(d) Collection Schedule**

The specific frequency for each information collection activity within this request is shown below in Table 1: Annual Respondent Burden and Cost – NESHAP for Portland Cement Plants (40 CFR Part 63, Subpart LLL) (Renewal).

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

Table 1 documents the computation of individual burdens for the recordkeeping and reporting requirements applicable to the industry for the subpart included in this ICR. The individual burdens are expressed under standardized headings believed to be consistent with the concept of burden under the Paperwork Reduction Act. Where appropriate, specific tasks and major assumptions have been identified. Responses to this information collection are mandatory.

The Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number.

**6(a) Estimating Respondent Burden**

The average annual burden to industry over the next three years from these recordkeeping and reporting requirements is estimated to be 59,600 hours (Total Labor Hours from Table 1 below). 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.

**6(b) Estimating Respondent Costs**

**(i) Estimating Labor Costs**

This ICR uses the following labor rates:

Managerial $129.93 ($61.87+ 110%)

Technical $103.97 ($49.51 + 110%)

Clerical $51.79 ($24.66 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2014, “Table 2. Civilian Workers, by occupational and industry group.” The rates are from column 1, “Total compensation.” The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

**(ii) Estimating Capital/Startup and Operation and Maintenance Costs**

The type of industry costs associated with the information collection activities in the subject standard are both labor costs which are addressed elsewhere in this ICR and the costs associated with continuous monitoring. The capital/startup costs are one-time costs incurred when a facility becomes subject to the regulation. The annual operation and maintenance costs are the ongoing costs required to maintain the monitor(s) and such other costs as photocopying and postage.

**(iii) Capital/Startup vs. Operation and Maintenance (O&M) Costs**

The annual total capital (including startup) cost for CEMS will be used to monitor THC, Hg, HCl, and PM (plus flow CEMS) is $604,456 per kiln. The annual O&M costs for CEMS for these parameters 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).

It is anticipated that new kilns will use CEMS for compliance with the THC, Hg, HCl (or Method 321 for scrubber-equipped kilns), and PM emission limits. The initial CEMS testing cost is estimated to be $131,222 per kiln.

An estimated 26 kilns have integrated coal mills with stand-alone stacks. For these kilns, the capital costs are estimated at $35,780 per kiln for purchase and installation of a flow monitoring device, and $50,800 per kiln for HCl, THC, and Hg testing. O&M costs for flow meters is $2,589 per year per facility.

| **Capital/Startup vs. Operation and Maintenance (O&M) Costs** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| (A)  Continuous Monitoring Device | (B)  Capital/Startup Cost for One Respondent | (C)  Number of New Respondents | (D)  Total Capital/Startup Cost, (B X C) | (E)  Annual O&M Costs for One Respondent | (F)  Number of Respondents with O&M | (G)  Total O&M,  (E X F) |
| Continuous Emission Monitors | $604,456 | 5 | $3,022,280 | $116,459 | 138 | $16,071,342 |
| Initial CEMS testing | $131,222 | 5 | $656,110 |  |  |  |
| Flow monitoring device for coal mills | $35,780 | 0 | $0 | $2,589 | 26 | $67,314 |
| Coal mill testing | $50,800 | 0 | $0 |  |  |  |
| **TOTAL** |  |  | $3,680,000 |  |  | $16,100,000 |

Note: Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

The total capital/startup costs for this ICR are $3,680,000. This is the total of column D in the above table.

The total operation and maintenance (O&M) costs for this ICR are $16,100,000. This is the total of column G.

The average annual cost for capital/startup and operation and maintenance costs to this industry over the next three years of the ICR is estimated to be $19,800,000. These are recordkeeping costs.

**6(c) Estimating Agency Burden and Cost**

The only costs to the Agency are those costs associated with analysis of the reported information. EPA's overall compliance and enforcement program includes activities such as the examination of records maintained by the respondents, periodic inspection of sources of emissions, and the publication and distribution of collected information.

The average annual Agency cost during the three years of the ICR is estimated to be $97,500.

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

Managerial $62.90 (GS-13, Step 5, $39.31 + 60%)

Technical $46.67 (GS-12, Step 1, $29.17 + 60%)

Clerical $25.25 (GS-6, Step 3, $15.78 + 60%)

These rates are from the Office of Personnel Management (OPM), 2014 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees. Details upon which this estimate is based appear below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Portland Cement Plants (40 CFR Part 63, Subpart LLL) (Renewal).

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

Based on our research for this ICR, on average over the next three years, approximately 87 existing respondents with 133 non-hazardous waste cement kilns will be subject to the standard. It is estimated that an additional 5 kilns per year will become subject. The overall average number of respondents, as shown in the table below, is 87 per year.

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 five-year NESHAP review period. All new kilns are estimated to be newly constructed at existing Portland cement plants.

The number of respondents is calculated using the following table that addresses the three years covered by this ICR:

| **Number of Respondents** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  | Respondents That Submit Reports | | Respondents That Do Not Submit Any Reports |  | |
| Year | (A)  Number of New Respondents 1 | (B)  Number of Existing Respondents | (C)  Number of Existing Respondents that keep records but do not submit reports | (D)  Number of Existing Respondents That Are Also New Respondents | (E)  Number of Respondents  (E=A+B+C-D) |
| 1 | 5 | 87 | 0 | 5 | 87 |
| 2 | 5 | 87 | 0 | 5 | 87 |
| 3 | 5 | 87 | 0 | 5 | 87 |
| Average | 5 | 87 | 0 | 5 | 87 |

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

Column D is subtracted to avoid double-counting respondents. As shown above, the average Number of Respondents over the three year period of this ICR is 87.

The total number of annual responses per year is calculated using the following table:

| **Total Annual Responses** | | | | |
| --- | --- | --- | --- | --- |
| (A)  Information Collection Activity | (B)  Number of Respondents | (C)  Number of Responses | (D)  Number of Existing Respondents That Keep Records But Do Not Submit Reports | (E)  Total Annual Responses  E=(BxC)+D |
| Notification of construction/reconstruction | 13.7 | 1 | 0 | 13.7 |
| Notification of actual startup | 13.7 | 1 | 0 | 13.7 |
| Physical or Operational Change | 13.7 | 1 | 0 | 13.7 |
| Notification of Demonstration of CEMS | 13.7 | 1 | 0 | 13.7 |
| Notification of Initial Performance Test | 13.7 | 1 | 0 | 13.7 |
| Report of Performance Test | 13.7 | 1 | 0 | 13.7 |
| Report of Semi-Annual Reports | 87 | 2 | 0 | 174 |
|  |  |  | Total | 256 |

The number of Total Annual Responses is 256.

The total annual labor costs are $5,990,000. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Portland Cement Plants (40 CFR Part 63, Subpart LLL) (Renewal).

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

The detailed bottom line burden hours and cost calculations for the respondents and the Agency are shown in Tables 1 and 2 below, respectively, and summarized below.

**(i) Respondent Tally**

The total annual labor hours are 59,600 hours. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Portland Cement Plants (40 CFR Part 63, Subpart LLL) (Renewal).

We assume that burdens for managerial tasks take 5% of the time required for technical tasks because the typical tasks for managers are to review and approve reports. Clerical burdens are assumed to take 10% of the time required for technical tasks because the typical duties of clerical staff are to proofread the reports, make copies and maintain records.

Furthermore, the annual public reporting and recordkeeping burden for this collection of information is estimated to average 233 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are $19,800,000. The cost calculations are detailed in Section 6(b)(iii), Capital/Startup vs. Operation and Maintenance (O&M) Costs.

**(ii) The Agency Tally**

The average annual Agency burden and cost over next three years is estimated to be 2,140 labor hours at a cost of $97,500. See (below) Table 2: Average Annual EPA Burden and Cost – NESHAP for Portland Cement Plants (40 CFR Part 63, Subpart LLL) (Renewal).

We assume that burdens for managerial tasks take 5% of the time required for technical tasks because the typical tasks for managers are to review and approve reports. Clerical burdens are assumed to take 10% of the time required for technical tasks because the typical duties of clerical staff are to proofread the reports, make copies and maintain records.

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

There is an overall decrease in burden as currently identified in the OMB Inventory of Approved Burdens. This decrease is not due to any program changes. The change in the burden and cost estimates occurred because the standards have been in effect for more than three years and the requirements are different during initial compliance (new facilities) as compared to on-going compliance (existing facilities). The previous ICR reflected those burdens and costs associated with the initial activities for subject facilities. This includes purchasing monitoring equipment, conducting performance tests and establishing recordkeeping systems. This ICR, by in large, reflects the on-going burden and costs for existing facilities. Activities for existing source include continuously monitoring of pollutants and the submission of semiannual reports. In addition, we have updated the number of respondents from 100 to 87 using the most recent data available. The overall result in a decrease in the number of responses, labor hours, and costs (including capital and O&M cost).

**6(g) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 233 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 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-OECA-2013-0337. An electronic version of the public docket is available at <http://www.regulations.gov/>, which may be used to obtain a copy of the draft collection of information, submit or view public comments, access the index listing of the contents of the docket, and to access those documents in the public docket that are available electronically. When in the system, select “search,” then key in the docket ID number identified in this document. The documents are also available for public viewing at the Enforcement and Compliance Docket and Information Center in the EPA Docket Center (EPA/DC), WJC West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the docket center is (202) 566-1752. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OECA-2013-0337 and OMB Control Number 2060-0416 in any correspondence.

**Part B of the Supporting Statement**

This part is not applicable because no statistical methods were used in collecting this information.

**Table 1: Annual Respondent Burden and Cost – NESHAP for Portland Cement Plants (40 CFR Part 63, Subpart LLL) (Renewal)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Burden Item** | (A) Hours per Occurrence | (B) Occurrence per Respondent /Year | (C) Hours/ Respondent/ Year  (A x B) | (D) Respondent/ Yeara | (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/ Yearb |
| 1. APPLICATIONS (Not Applicable) |  |  |  |  |  |  |  |  |
| 2. SURVEY AND STUDIES (Not Applicable) |  |  |  |  |  |  |  |  |
| 3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS | 16 | 1 | 16 | 5 | 80 | 4 | 8 | $9,251.64 |
| 4. REPORT REQUIREMENTS |  |  |  |  |  |  |  |  |
| A. Familiarize with regulatory requirement | 1 | 1 | 1 | 87 | 87 | 4.35 | 8.7 | $10,061.16 |
| B. Required Activities |  |  |  |  |  |  |  |  |
| *Existing Sources* |  |  |  |  |  |  |  |  |
| Initial Performance Test | 24 | 1 | 24 | 8.7 | 208.8 | 10.44 | 20.88 | $24,146.78 |
| Reference Method 321 Test | 8 | 1 | 8 | 8.7 | 69.6 | 3.48 | 6.96 | $8,048.93 |
| Repeat Performance Test  (assumes 10% repeat test) | 24 | 1 | 24 | 1 | 24 | 1.2 | 2.4 | $2,775.49 |
| Initial THC Performance Test | 8 | 1 | 8 | 8.7 | 69.6 | 3.48 | 6.96 | $8,048.93 |
| Repeat THC Performance Test | 8 | 1 | 8 | 1 | 8 | 0.4 | 0.8 | $925.16 |
| Initial Hg Performance Test | 40 | 1 | 40 | 8.7 | 348 | 17.4 | 34.8 | $40,244.63 |
| Repeat Hg Performance Test | 8 | 1 | 8 | 1 | 8 | 0.4 | 0.8 | $925.16 |
| Initial HCl Performance Test | 16 | 1 | 16 | 8.7 | 139.2 | 6.96 | 13.92 | $16,097.85 |
| Repeat HCl Performance Test | 16 | 0.2 | 3.2 | 1 | 3.2 | 0.16 | 0.32 | $370.07 |
| Initial PM CEMS Performance  Specification 11 | 40 | 0.2 | 8 | 8.7 | 69.6 | 3.48 | 6.96 | $8,048.93 |
| Repeat PM CEMS Performance  Specification 11 | 40 | 0.2 | 8 | 1 | 8 | 0.4 | 0.8 | $925.16 |
| CEMS Monitoring | 0.5 | 1 | 0.5 | 138 | 69 | 3.45 | 6.9 | $7,979.54 |
| CEMS Quarterly Inspections | 2 | 4 | 8 | 138 | 1,104 | 55.2 | 110.4 | $127,672.63 |
| CEMS Daily Calibration Drift Tests | 0.3 | 330 | 99 | 138 | 13,662 | 683.1 | 1366.2 | $1,579,948.82 |
| Daily monitoring (CEMS) | 2 | 4 | 8 | 138 | 1,104 | 55.2 | 110.4 | $127,672.63 |
| All CEMS must follow appropriate  performance specifications | 0.3 | 330 | 99 | 138 | 13,662 | 683.1 | 1366.2 | $1,579,948.82 |
| *New Sources* |  |  |  |  |  |  |  |  |
| Initial Performance Test | 0.3 | 330 | 99 | 5 | 495 | 24.75 | 49.5 | $57,244.52 |
| Reference Method 321 Test | 8 | 1 | 8 | 5 | 40 | 2 | 4 | $4,625.82 |
| Repeat Performance Test  (assumes 10% repeat test) | 8 | 1 | 8 | 1 | 8 | 0.4 | 0.8 | $925.16 |
| Initial THC Performance Test | 24 | 1 | 24 | 5 | 120 | 6 | 12 | $13,877.46 |
| Repeat THC Performance Test | 8 | 1 | 8 | 1 | 8 | 0.4 | 0.8 | $925.16 |
| Initial Hg Performance Test | 8 | 1 | 8 | 5 | 40 | 2 | 4 | $4,625.82 |
| Repeat Hg Performance Test | 40 | 1 | 40 | 1 | 40 | 2 | 4 | $4,625.82 |
| Initial HCl Performance Test | 0 | 0 | 0 | 5 | 0 | 0 | 0 | $0.00 |
| Repeat HCl Performance Test | 16 | 1 | 16 | 1 | 16 | 0.8 | 1.6 | $1,850.33 |
| Initial PM CEMS Performance  Specification 11 | 16 | 0.2 | 3.2 | 5 | 16 | 0.8 | 1.6 | $1,850.33 |
| Repeat PM CEMS Performance  Specification 11 | 40 | 1 | 40 | 1 | 40 | 2 | 4 | $4,625.82 |
| CEMS Monitoring | 40 | 0.2 | 8 | 5 | 40 | 2 | 4 | $4,625.82 |
| CEMS Quarterly Inspections | 0.5 | 1 | 0.5 | 5 | 2.5 | 0.13 | 0.25 | $289.11 |
| CEMS Daily Calibration Drift Tests | 2 | 4 | 8 | 5 | 40 | 2 | 4 | $4,625.82 |
| Daily monitoring (CEMS) | 2 | 4 | 8 | 5 | 40 | 2 | 4 | $4,625.82 |
| All CEMS must follow appropriate performance specifications | 0.3 | 330 | 99 | 5 | 495 | 24.75 | 49.5 | $57,244.52 |
| 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 | 8.7 | 17.4 | 0.87 | 1.74 | $2,012.23 |
| Notification of actual startup | 2 | 1 | 2 | 8.7 | 17.4 | 0.87 | 1.74 | $2,012.23 |
| Physical or Operational Change | 2 | 1 | 2 | 8.7 | 17.4 | 0.87 | 1.74 | $2,012.23 |
| Notification of Demonstration of CEMS | 2 | 1 | 2 | 8.7 | 17.4 | 0.87 | 1.74 | $2,012.23 |
| Report of Performance Test  (included in 4B) |  |  |  |  |  |  |  |  |
| Notification of Initial Performance Test | 2 | 1 | 2 | 8.7 | 17.4 | 0.87 | 1.74 | $2,012.23 |
| Report of Performance Test | 2 | 1 | 2 | 8.7 | 17.4 | 0.87 | 1.74 | $2,012.23 |
| Report of Semi-Annual Reports | 2 | 2 | 4 | 87 | 348 | 17.4 | 34.8 | $40,244.63 |
| *New Sources* |  |  |  |  |  |  |  |  |
| Notification of construction/reconstruction | 2 | 1 | 2 | 5 | 10 | 0.5 | 1 | $1,156.46 |
| Notification of actual startup | 2 | 1 | 2 | 5 | 10 | 0.5 | 1 | $1,156.46 |
| Physical or Operational Change | 2 | 1 | 2 | 5 | 10 | 0.5 | 1 | $1,156.46 |
| Notification of Demonstration of CEMS | 2 | 1 | 2 | 5 | 10 | 0.5 | 1 | $1,156.46 |
| Report of Performance Test  (included in 4B) |  |  |  |  |  |  |  |  |
| Notification of Initial Performance Test | 2 | 1 | 2 | 5 | 10 | 0.5 | 1 | $1,156.46 |
| Report of Performance Test | 2 | 1 | 2 | 5 | 10 | 0.5 | 1 | $1,156.46 |
| Report of Semi-Annual Reports | 24 | 2 | 48 | 5 | 240 | 12 | 24 | $27,754.92 |
| **Subtotal for Reporting Requirements** |  |  |  |  | **37,854** | | | **$3,806,691** |
| 5. RECORDKEEPING REQUIREMENTS |  |  |  |  |  |  |  |  |
| A. Familiarize with regulatory requirement  (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 | 138 | 4,554 | 227.7 | 455.4 | $526,649.61 |
| Records of Startups, Shutdowns,  malfunctions, etc | 0.1 | 330 | 33 | 138 | 4,554 | 227.7 | 455.4 | $526,649.61 |
| *New Sources* |  |  |  |  |  |  |  |  |
| Data Collection | 1.5 | 330 | 495 | 5 | 2,475 | 123.75 | 247.5 | $286,222.61 |
| Records of Startups, Shutdowns,  malfunctions, etc | 0.1 | 330 | 33 | 5 | 165 | 8.25 | 16.5 | $19,081.51 |
| Coal mill parameter monitoring | 2 | 4 | 8 | 26 | 208 | 10.4 | 20.8 | $24,054.26 |
| F. Time to Train Personnel | 80 | 1 | 80 | 87 | 6,960 | 348 | 696 | $804,892.68 |
| G. Time for Audits (Not Applicable) |  |  |  |  |  |  |  |  |
| **Subtotal for Recordkeeping Requirements** |  |  |  |  | **21,753** | | | **$2,187,550** |
| **TOTAL ANNUAL LABOR BURDEN AND COST c** |  |  |  |  | **59,600** | | | **$5,990,000** |
| Total Capital and O&M Cost c |  |  |  |  |  |  |  | $19,800,000 |
| **GRAND TOTAL c** |  |  |  |  |  |  |  | **$25,800,000** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| a We have assumed that there are approximately 87 respondents, 10% of the 87 existing facilities (8.7 facilities) will have new construction/reconstruction, and 5 new Portland cement kilns per year will be required to complete performance tests and new/revised reports over the next three years. | | | | | |
| b This ICR uses the following labor rates: $129.93 per hour for Executive, Administrative, and Managerial labor; $103.97 per hour for Technical labor, and $51.79 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2014 “Table 2. Civilian workers, by occupational and industry group.” The rates are from column 1, “Total compensation.” The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry. | | | | | |
| c Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding. |  |  |  |  |  |

**Table 2: Average Annual EPA Burden and Cost – NESHAP for Portland Cement Plants (40 CFR Part 63, Subpart LLL) (Renewal)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **(A)** | **(B)** | **(C)** | **(D)** | **(E)** | **(F)** | **(G)** | **(H)** |
| **EPA person- hours per occurrence** | **No. of occurrences per plant per year** | **EPA person- hours per plant per year** | **Plants per year a** | **Technical person- hours per year** | **Management person-hours per year** | **Clerical person-hours per year** | **Cost, $ b** |
|  |  | **(C=AxB)** |  | **(E=CxD)** | **(Ex0.05)** | **(Ex0.1)** |  |
| Initial performance tests c | 24 | 1 | 24 | 13.7 | 328.8 | 16.4 | 32.9 | $17,209.39 |
| Repeat performance test d | 24 | 0.2 | 4.8 | 1 | 4.8 | 0.2 | 0.5 | $251.23 |
| Report Review |  |  |  |  |  |  |  |  |
| Notification of construction | 0.5 | 1 | 0.5 | 13.7 | 6.9 | 0.3 | 0.7 | $358.53 |
| Notification of actual startup | 0.5 | 1 | 0.5 | 13.7 | 6.9 | 0.3 | 0.7 | $358.53 |
| Notification of performance test c | 0.5 | 1.1 | 0.55 | 13.7 | 7.5 | 0.4 | 0.8 | $394.38 |
| Notification of Physical or Operational Change | 0.5 | 1 | 0.5 | 13.7 | 6.9 | 0.3 | 0.7 | $358.53 |
| Review test results/CEMS Results | 8 | 1 | 8 | 13.7 | 109.6 | 5.48 | 10.96 | $5,736.46 |
| Review semi-annual summary report | 8 | 2 | 16 | 87 | 1392 | 69.6 | 139.2 | $72,857.28 |
| **Subtotals Labor Burden and Cost** |  |  |  |  | **1,863.29** | **93.2** | **186.3** | **$97,524.34** |
| **TOTAL ANNUAL BURDEN AND COST (rounded) e** |  |  |  |  | **2,140** | | | **$97,500** |
|

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Assumptions:** |  |  |  |  |  |  |  |  |
| a We have assumed that there are approximately 87 respondents, 10% of the 87 existing facilities (8.7 facilities) will have new construction/reconstruction, and 5 new Portland cement kilns per year will be required to complete performance tests and new/revised reports over the next three years. | | | | | | | | |
| b This cost is based on the following hourly labor rates times a 1.6 benefits multiplication factor to account for government overhead expenses: $62.90 for Managerial (GS-13, Step 5, $39.31 x 1.6), $46.67 for Technical (GS-12, Step 1, $29.17 x 1.6) and $25.25 Clerical (GS-6, Step 3, $15.78 x 1.6). These rates are from the Office of Personnel Management (OPM) “2014 General Schedule” which excludes locality rates of pay. | | | | | | | | |
| c We have assumed that it will take twenty-four hours for each new respondent to perform the initial performance test. | | | | | | |  |  |
| d We have assumed that 10 percent of respondents would repeat performance test due to failure. | | | | |  |  |  |  |
| e Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding. | | | | |  |  |  |  |