**SUPPORTING STATEMENT**

**ENVIRONMENTAL PROTECTION AGENCY**

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

**1. Identification of the Information Collection**

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

NESHAP for Portland Cement Manufacturing Industry (40 CFR Part 63, Subpart LLL) (Renewal), EPA ICR Number 1801.13, OMB Control Number 2060-0416.

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

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Portland Cement Manufacturing Industry (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 promulgated on the following four dates: September 9, 2010; February 12, 2013; July 27, 2015; and September 11, 2015. Direct final rules were published on the following three dates: July 25, 2016; June 23, 2017; and August 22, 2017[[1]](#footnote-1). Amendments implementing the residual risk review requirements of CAA section 112(f)(2) and the technology review requirements of CAA section 112(d)(6) were published on July 25, 2018, with a correction issued August 3, 2018[[2]](#footnote-2).

These regulations apply to affected facilities at each new and existing portland cement manufacturing plant that is either a major or area source, including each: kiln including alkali bypasses and inline coal mills; clinker cooler; raw mill; finish mill; raw material dryer; or open clinker storage pile. These regulations apply to each new and existing categories: raw material, clinker or finished product storage bin; conveying system transfer point including those associated with coal preparation used to convey coal from the mill to the kiln; and bagging and bulk loading and unloading system piles located at any portland cement manufacturing plant that is a major source. These regulations do not apply to cement kilns that burn hazardous waste and are subject to 40 CFR Part 63, Subpart EEE, or to cement kilns that burn nonhazardous solid waste and are subject to the requirements of 40 CFR Part 60, Subpart CCCC or 40 CFR Part 60, Subpart DDDD. 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 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. If there is no such delegated authority, the reports are sent directly to the U.S. Environmental Protection Agency (EPA) regional office.

The “Affected Public” are either 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, or to cement kilns that burn nonhazardous solid waste and are subject to the requirements of 40 CFR Part 60, Subpart CCCC or 40 CFR Part 60, Subpart DDDD. The Affected Public estimated burden is located in Table 9: Annual Respondent Estimated Burden and Cost – NESHAP for Portland Cement Manufacturing Industry (40 CFR Part 63, Subpart LLL) (Renewal). The Federal Government estimated burden is based on work performed by either Federal employees or government contractors and is located in Table 10: Average Annual EPA Estimated Burden and Cost – NESHAP for Portland Cement Manufacturing Industry (40 CFR Part 63, Subpart LLL) (Renewal). There are approximately 40 portland cement plants, which are owned and operated by the portland cement manufacturing industry. None of the 40 facilities in the United States are owned by either state, local, tribal or the Federal government. They are all owned and operated by privately-owned, for-profit businesses. We assume that they will all respond to EPA inquiries.

Based on our consultations with industry representatives, there is an average of one cement kiln burning non-hazardous waste at each portland cement manufacturing plant site and each plant site has only one respondent (i.e., the owner/operator of the plant site).

Over the next three years, approximately 40 respondents per year will be subject to these standards. These respondents include 40 portland cement manufacturing plants operating approximately 40 cement kilns. Over the next three years, we expect 10% of existing equipment to be reconstructed or modified each year. During this period, we estimate no new cement kilns will be constructed at existing portland cement manufacturing plants. It is estimated that no additional respondents will become subject to these same standards over the three-year period.

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 plants 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. The subject standard(s) 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 these 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 these standards are used to inform either the Agency or its 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 these 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* (83 FR 24785) on May 30, 2018. No comments were received on the burden published in the *Federal Register* for this renewal.

**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 these 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. During the Risk and Technology Review (RTR) conducted in 2018, EPA consultations with companies and industry representatives revealed that previously operational kilns had either shut down or been consolidated into fewer companies (respondents). Still other kilns thought subject to Subpart LLL were found to be subject to other rules ( Kilns subject to Subpart EEE and CISWI kilns subject to 40 CFR Part 60, Subpart CCCC or 40 CFR Part 60, Subpart DDDD).HazWaste These same consultations indicated that no Docket # EPA-HQ-OAR-2016-0442).https://www.regulations.gov/ HYPERLINK "https://www.regulations.gov/" new kilns were being constructed. The 2018 RTR was published July 25, 2018 at 83 FR 35122. EPA’s research on the industry, consultations, and comments are available in the docket for the RTR ( Approximately 40 respondents will be subject to these standards over the three-year period covered by this ICR. Additionally, Agency consultations with industry indicate that new no kilns would be expected over the next three years, although there would be a minimal number of modified or reconstructed sources.

Industry trade associations and other interested parties were provided an opportunity to comment on the ‘burden’ associated with these 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 (847) 966-6200, and the National Ready Mixed Concrete Association, at (240) 485-1157.

It is our policy to respond after a thorough review of comments received since the last ICR renewal, as well as for 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 these 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 same 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 plants. 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) 327310 for cement manufacturing.

**4(b) Information Requested**

**(i) Data Items**

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

A source must adhere to the following requirements listed in Tables 1-3:

| **Table 1: Notification Requirements** | | |
| --- | --- | --- |
| **Notification Requirements** | **40 CFR Part 63 Section** |
| Notification of anticipated startup | §63.1353(b)(1) |
| Notification of applicability | §63.1353(b)(1), §§63.9(b)(1)-(2) |
| Notification of actual startup | §63.1353(b)(1), §63.9(b)(4)(v) |
| Notification of construction/reconstruction | §63.1353(b)(1), §63.9(b)(5) |
| Request for extension of compliance | §63.1353(b)(1), §63.9(c) |
| Notification of special compliance requirements | §63.1353(b)(1), §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 | §63.1353(b)(3), §63.6(h)(5), §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) |

| **Table 2: Reporting Requirements** | |
| --- | --- |
| **Reporting Requirements** | **40 CFR Part 63 Section** |
| Operations and maintenance plan | §63.1347 |
| Report of performance test | §§63.1354(b)(1), (11), §63.10(d)(2) |
| Opacity and visual emission observation | §63.1354(b)(2), §63.10(d)(3) |
| Progress reports | §63.1354(b)(3), §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 | §63.1354(b)(6), §63.10(e)(2) |
| Excess emissions and continuous monitoring system performance reports | §63.1354(b)(8), §63.10(e)(3) |
| Reporting continuous opacity monitoring system data produced during a performance test | §63.1354(b)(7), §63.10(e)(2) |
| Reporting monitoring exceedance | §§63.1354(b)(8)-(10), §63.10(e)(3) |
| Waiver of recordkeeping and reporting requirements | §63.1355(b)(3), §63.10(f) |
| Semi-annual compliance report | §63.1354(b)(9) |

| **Table 3: Recordkeeping Requirements** | | |
| --- | --- | --- |
| Recordkeeping Requirements | 40 CFR Part 63 Section |
| 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 of daily clinker production rates | §63.1355(e) |
| Operation and Maintenance Plan | §63.1343(c), §63.1346(f), §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) |
| Records of each startup or shutdown period subject to a standard | §63.1355(f) |
| Records of each malfunction that causes an affected source to fail to meet an applicable standard | §63.1355(g) |
| Records of each exceedance from an emissions standard | §63.1355(h) |
| Waiver of recordkeeping and reporting requirements | §63.1355(b)(3), §63.10(f) |

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. Section 63.1354(b)(9) requires that the respondent submit a summary report semiannually within 60 days of the reporting period to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) (https://www.epa.gov/electronic-reporting-air-emissions/cedri). Section 63.1354(b)(11)(i)(C) requires that the respondent submit the relative accuracy test audit data and performance test data to the EPA electronically via EPA’s CEDRI and by using the Electronic Reporting Tool (ERT) (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert). For any performance evaluations with no corresponding RATA pollutants listed on the ERT website, facilities must submit the results of the performance evaluation to the Administrator. Section 63.1354(b)(9) requires that the respondent submit excess emissions and summary reports semiannually via CEDRI. All other reports continue to be submitted as required currently.

**(ii) Respondent Activities**

The activities described in the Respondent Activities table are typical actions that an existing or new source subject to the requirements of NESHAP for Portland Cement Manufacturing Industry (40 CFR Part 63, Subpart LLL) might complete in order to comply with the rule.

| **Table 4: Respondent Activities** | **Applicable Rules** |
| --- | --- |
| Familiarization with the regulatory requirements. | §§63.1-15, §§63.1340-1359 |
| 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. | §63.8, §§63.1350-1351 |
| 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. | §63.7, §63.1349, §63.1352 |
| Write the notifications and reports listed above. | §§63.9-10, §§63.1353-1354 |
| Enter information required to be recorded above. | §63.10, §63.1355 |
| Submit the required reports developing, acquiring, installing, and utilizing technology and systems for collecting, validating, and verifying information. | §§63.9-10, §63.1354 |
| Develop, acquire, install, and utilize technology and systems for processing and maintaining information. | §63.10, §63.1355 |
| Develop, acquire, install, and utilize technology and systems for disclosing and providing information. | §63.10, §63.1354 |
| Train personnel to be able to respond to a collection of information. | §63.10, §63.1355 |
| Transmit, or otherwise disclose the information. | §§63.9-10, §§63.1353-1354 |

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**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:

|  |  |
| --- | --- |
| **Table 5: Agency Activities** | **Applicable Rules** |
| Observe initial performance tests and repeat performance tests, if necessary. | §63.7, §§63.1349-1350 |
| Review notifications and reports, including performance test reports, and excess emissions reports, required to be submitted by industry. | §§63.9-10, §§63.1353-1354 |
| Audit facility records. | §63.10, §63.1355 |
| Input, analyze, and maintain data in the Enforcement and Compliance History Online (ECHO) and ICIS. | §§63.1353-1355,  42 U.S.C. §7414(a)(1), |

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**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 standards. 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 businesses 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 9: Annual Respondent Estimated Burden and Cost – NESHAP for Portland Cement Manufacturing Industry (40 CFR Part 63, Subpart LLL) (Renewal).

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

Table 9 documents the computation of individual estimated burdens for the recordkeeping and reporting requirements applicable to the industry for the subpart included in this ICR. The individual estimated burdens are listed under 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.

**6(a) Estimating Respondent Burden**

EPA estimates that, over the next three years, approximately 40 existing respondents and no new respondents per year will be subject to these standards. EPA also expects 10% of existing equipment to be reconstructed or modified each year. Detailed estimates of burden for existing and reconstructed sources are shown at the end of this document in Table 9. The average annual burden to industry over the next three years from these record-keeping and reporting requirements is estimated to be 12,200 hours (Total Labor Hours from Table 9 below). This is a significant reduction in burden from the previous collection and this reduction is due to a .decrease in the estimate of the number of sources subject to these regulations. A full explanation for the decrease in the number of respondents is given in Section 3(c) above

**6(b) Estimating Respondent Costs**

**(i) Estimating Labor Costs**

This ICR uses the following labor rates:

Managerial $147.40 ($70.19+ 110%)

Technical $117.92 ($56.15 + 110%)

Clerical $57.02 ($27.15 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2018, “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(s) 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 when a facility becomes subject to the regulations. The annual operation and maintenance costs are the ongoing costs to maintain the monitors and other costs such as photocopying and postage.

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

Tables 6 and 7 provide an itemized breakdown of the capital costs for a new source, as well as the ongoing operation and maintenance costs for new, reconstructed, and existing sources. Estimates of the number of sources affected by each requirement are based on the number of respondents and EPA’s knowledge of the industry.

| **Table 6: Capital/Startup vs. Operation and Maintenance (O&M) Costs for Kilns Using CEMS for Compliance** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| (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 Monitors1 | $604,456 | 0 | $0 | $116,459 | 40 | $4,658,360 |
| Initial CEMS testing2 | $131,222 | 0 | $0 | NA | NA | NA |
| Total3 |  |  | $0 |  |  | $4,660,000 |

1 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. These costs are derived from EPA’s CEM.xls spreadsheet, Method 321 costs from EPA, and Hg costs from 69 FR 4694 (January 30, 2004). These costs would apply only to new respondents constructing new kilns.

2 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, and would only apply to new respondents constructing new kilns.

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

| **Table 7: Capital/Startup vs. Operation and Maintenance (O&M) Costs for Kilns With Integrated Coal Mills With Stand-Alone Stacks** | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| (A)  Continuous Monitoring Device1 | (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) |
| Flow monitoring device for coal mills | $35,780 | 0 | $0 | $2,589 | 26 | $67,314 |
| Coal mill testing | $50,800 | 0 | $0 | $0 | 0 | 0 |
| Total2 |  |  | $0 |  |  | $67,300 |

1 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. These costs are only applicable to new respondents constructing new kilns. O&M costs for flow meters is $2,589 per year per facility.

2 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 $0. This is the total of column D in the above tables. The decrease in estimates of capital/startup costs from the previous ICR are due to updated information on industry plans for expansion. During the Risk and Technology Review conducted in 2018, EPA consultations with companies and industry representatives revealed that that no new kilns were being constructed or expected to be constructed.

The total operation and maintenance (O&M) costs for this ICR are $4,730,000. This is the total of column G in the above tables.

The average annual cost for capital/startup and operation and maintenance costs to industry over the next three years of the ICR is estimated to be $4,730,000.

**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 such activities 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 $61,100.

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

Managerial $65.71 (GS-13, Step 5, $41.07 + 60%)

Technical $48.75 (GS-12, Step 1, $30.47 + 60%)

Clerical $26.38 (GS-6, Step 3, $16.49 + 60%)

These rates are from the Office of Personnel Management (OPM), 2018 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to Federal government employees. Details upon which this estimate is based appear below in Table 10: Average Annual EPA Estimated Burden and Cost – NESHAP for Portland Cement Manufacturing Industry (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 40 portland cement facilities will be subject to these standards. It is estimated that there will be no new portland cement facilities over the next three years. This is a decrease from the previous ICR, in which EPA estimated that 87 existing cement plants would be subject to these regulations and five new plants per year would become subject. The reasons for the decrease are explained in Section 3(c) above.portland

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The total number of annual responses per year is calculated in Table 8: Total Annual Responses. The number of Total Annual Responses is 204. Note that 4 respondents have been double counted in Table 8 because they have both existing affected kilns and newly affected kilns.

| **Table 8: 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 a | 4 | 1 | 0 | 4 |
| Notification of actual startup a | 4 | 1 | 0 | 4 |
| Physical or Operational Change a | 4 | 1 | 0 | 4 |
| Notification of Demonstration of CEMS a | 4 | 1 | 0 | 4 |
| Notification of Initial Performance Test a | 4 | 1 | 0 | 4 |
| Notification of Annual Performance Test | 40 | 1 | 0 | 40 |
| Notification of opacity and visible emission observations a | 4 | 1 | 0 | 4 |
| Notification of CEMS performance evaluation a | 4 | 1 | 0 | 4 |
| Report of Initial and Annual Performance Test Results a | 44 | 1 | 0 | 44 |
| Report of opacity test results a | 4 | 1 | 0 | 4 |
| Report results of the CEMS performance  Evaluation a | 4 | 1 | 0 | 4 |
| Report of excess emissions and continuous monitoring system performance a | 4 | 1 | 0 | 4 |
| Semiannual Reports | 40 | 2 | 0 | 80 |
|  |  |  | Total | 204 |

a Approximately 10% of the 40 existing sources (4) are expected to undergo construction, reconstruction, or modification of equipment each year, resulting in notifications and reports for testing and evaluation of CEMS/COMS systems.

**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 below in Tables 9 and 10 at the end of this document respectively, and summarized below.

**(i) Respondent Estimated Labor Hours and Costs**

The total annual labor hours are estimated at 12,200 hours. Details regarding these estimates may be found below in Table 9: Annual Estimated Respondent Burden and Cost – NESHAP for Portland Cement Manufacturing Industry (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. The total annual estimated labor costs are $1,390,000. (rounded)Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Portland Cement Manufacturing Industry (40 CFR Part 63, Subpart LLL) (Renewal).

Furthermore, the annual public reporting and recordkeeping burden for this collection of information is estimated to average 58 hours per response.

**(ii) The Agency Tally**

The average annual Agency burden and cost over next three years is estimated to be 1,290 labor hours at a cost of $61,100; see below in Table 10: Average Annual EPA Estimated Burden and Cost – NESHAP for Portland Cement Manufacturing Industry (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 adjustment decrease in the total estimated burdenas currently identified in the OMB Inventory of Approved Burdens. The adjustment decrease in burden from the most recently-approved ICR is due to a decrease in the number of sources subject to requirement of 40 CFR Part 63, Subpart LLL. The EPA determined that many of the cement kilns previously thought subject to 40 CFR Part 63, Subpart LLL are already subject to 40 CFR Part 63, Subpart EEE (OMB No. 2060-0171), 40 CFR Part 60, Subpart CCCC (OMB No. 2060-0450), or 40 CFR Part 60, Subpart DDDD (OMB No. 2060-0664) and would not fall under the applicability of this subpart.

Additionally, we have revised and reformatted Table 9 to reflect the performance testing requirements for new and existing facilities as stated in Subpart LLL. This ICR reflects initial performance testing for PM, THC/HAP, Hg, and HCl required for new, reconstructed, and modified affected facilities, and annual re-testing for existing kilns and coolers only for PM, Hg, and HCl.

**6(g) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated at 96 hours per response for an existing source and 34 hours per response for an existing source that reconstructed during the year. 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. Responses to this information collection are mandatory.

An agency may neither conduct nor 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.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 9: Annual Respondent Estimated Burden and Cost – NESHAP for Portland Cement Manufacturing Industry (40 CFR Part 63, Subpart LLL) (Renewal)** | | | | | | | | |
| **Burden Item** | (A) Hours per Occurrence | (B) Occurrences/ Respondent/ Year | (C) Hours/ Respondent/ Year  (A x B) | (D) Respondents/ 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 | NA |  |  |  |  |  |  |  |
| 2. SURVEY AND STUDIES | NA |  |  |  |  |  |  |  |
| 3.ACQUISITION, INSTALLATION, AND UTILIZATION OF TECHNOLOGY AND SYSTEMS | 16 | 1 | 16 | 0 | 0 | 0 | 0 | $0 |
| 4FAMILIARIZE WITH REGULATORY REQUIREMENTS. | 1 | 1 | 1 | 40 | 40 | 2 | 4 | $5,239.68 |
| . REPORT REQUIREMENTS |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| A. Required Activities |  |  |  |  |  |  |  |  |
| *Reconstructed, Modified Sources - Testing* c |  |  |  |  |  |  |  |  |
| Initial PM Performance Test (kiln and cooler) | 24 | 2 | 48 | 4 | 192 | 9.6 | 19.2 | $25,150.46 |
| Repeat PM Performance Test | 24 | 2 | 2.4 | 0.2 | 10 | 0.48 | 0.96 | $1,257.52 |
| Initial D/F Performance Test (kiln) | 8 | 1 | 8 | 4 | 32 | 1.6 | 3.2 | $4,191.74 |
| Repeat D/F Performance Test | 8 | 1 | 0.4 | 0.2 | 2 | 0.08 | 0.16 | $209.59 |
| Initial THC/HAP Performance Test (kiln and dryer) | 8 | 2 | 16 | 4 | 64 | 3.2 | 6.4 | $8,383.49 |
| Repeat THC/HAP Performance Test | 8 | 2 | 0.8 | 0.2 | 3 | 0.16 | 0.32 | $419.17 |
| Initial Hg Performance Test (kiln) | 8 | 1 | 8 | 4 | 32 | 1.6 | 3.2 | $4,191.74 |
| Repeat Hg Performance Test | 8 | 1 | 0.4 | 0.2 | 2 | 0.08 | 0.16 | $209.59 |
| Initial HCl Performance Test (Method 321) (kiln) | 8 | 1 | 8 | 4 | 32 | 1.6 | 3.2 | $4,191.74 |
| Repeat HCl Performance Test | 8 | 1 | 0.4 | 0.2 | 2 | 0.08 | 0.16 | $209.59 |
| Initial Opacity Performance Test (mills) | 8 | 1 | 8 | 4 | 32 | 1.6 | 3.2 | $4,191.74 |
| Repeat Opacity Performance Test | 8 | 1 | 0.4 | 0.2 | 2 | 0.08 | 0.16 | $209.59 |
| *Existing Sources - Annual Testing* d |  |  |  |  |  |  |  |  |
| Annual PM Performance Test (kiln and cooler) | 24 | 2 | 48 | 40 | 1,920 | 96 | 192 | $251,504.64 |
| Repeat PM Performance Test | 24 | 2 | 2.4 | 2 | 96 | 4.8 | 9.6 | $12,575.23 |
| Annual Hg Performance Test (kiln) | 8 | 1 | 8 | 40 | 320 | 16 | 32 | $41,917.44 |
| Repeat Hg Performance Test | 8 | 1 | 0.4 | 2 | 16 | 0.8 | 1.6 | $2,095.87 |
| Annual HCl Performance Test (Method 321) (new, modified, reconstructed kilns) | 8 | 1 | 8 | 40 | 320 | 16 | 32 | $41,917.44 |
| Repeat HCl Performance Test | 8 | 1 | 0.4 | 2 | 16 | 0.8 | 1.6 | $2,095.87 |
| *New and Existing Sources - Monitoring* e |  |  |  |  |  |  |  |  |
| Daily Calibration Drift Tests - Hg CEMS | 0.3 | 330 | 99 | 40 | 3,960 | 198 | 396 | $518,728.32 |
| Monthly Opacity Checks (Method 22) (mills) | 0.5 | 12 | 6 | 40 | 240 | 12 | 24 | $31,438.08 |
| B. Create Information (Included in 4A) | See 4A |  |  |  |  |  |  |  |
| C. Gather Existing Information (Included in 4D) | See 4D |  |  |  |  |  |  |  |
| D. Write Report |  |  |  |  |  |  |  |  |
| *New, Reconstructed, Modified Sources* |  |  |  |  |  |  |  |  |
| Notification of construction/reconstruction | 2 | 1 | 2 | 4 | 8 | 0.4 | 0.8 | $1,047.94 |
| Notification of actual startup | 2 | 1 | 2 | 4 | 8 | 0.4 | 0.8 | $1,047.94 |
| Physical or Operational Change | 2 | 1 | 2 | 4 | 8 | 0.4 | 0.8 | $1,047.94 |
| Notification of Demonstration of CEMS | 2 | 1 | 2 | 4 | 8 | 0.4 | 0.8 | $1,047.94 |
| Notification of Opacity Observations | 2 | 1 | 2 | 4 | 8 | 0.4 | 0.8 | $1,047.94 |
| Notification of Initial Performance Test | 2 | 1 | 2 | 4 | 8 | 0.4 | 0.8 | $1,047.94 |
| Report of Performance Tests | 2 | 1 | 2 | 4 | 8 | 0.4 | 0.8 | $1,047.94 |
| Semi-Annual Reports | 24 | 2 | 48 | 4 | 192 | 9.6 | 19.2 | $25,150 |
| *Existing Sources* |  |  |  |  |  |  |  |  |
| Notification of Demonstration of CEMS | 2 | 1 | 2 | 40 | 80 | 4 | 8 | $10,479.36 |
| Notification of Annual Performance Test | 2 | 1 | 2 | 40 | 80 | 4 | 8 | $10,479.36 |
| Report of Annual Performance Test Results | 2 | 1 | 2 | 40 | 80 | 4 | 8 | $10,479.36 |
| Semi-Annual Reports | 2 | 2 | 4 | 40 | 160 | 8 | 16 | $20,958.72 |
| ***Subtotal for Reporting Requirements*** |  |  |  |  | ***9,136*** | | | ***$1,045,211*** |
| 5. RECORDKEEPING REQUIREMENTS |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| A. Plan Activities | See 4A |  |  |  |  |  |  |  |
| B. Implement Activities | See 4A |  |  |  |  |  |  |  |
| C. Record Data | NA |  |  |  |  |  |  |  |
| E. Time to Transmit or Disclose Information |  |  |  |  |  |  |  |  |
| *Existing Sources* |  |  |  |  |  |  |  |  |
| Data Collection | 0.1 | 330 | 33 | 40 | 1,320 | 66 | 132 | $172,909.44 |
| Records of Startups, Shutdowns, malfunctions, etc | 0.1 | 330 | 33 | 40 | 1,320 | 66 | 132 | $172,909.44 |
| *New Sources* |  |  |  |  |  |  |  |  |
| Data Collection | 1.5 | 330 | 495 | 0 | 0 | 0 | 0 | $0 |
| Records of Startups, Shutdowns, malfunctions, etc | 0.1 | 330 | 33 | 0 | 0 | 0 | 0 | $0 |
| Coal mill parameter monitoring | 2 | 4 | 8 | 0 | 0 | 0 | 0 | $0 |
| F. Time to Train Personnel | 80 | 1 | 80 | 0 | 0 | 0 | 0 | $0 |
| G. Time for Audits | NA |  |  |  |  |  |  |  |
| ***Subtotal for Recordkeeping Requirements*** |  |  |  |  | ***3,036*** | | | ***$345,819*** |
| **Total Labor Burden and Cost (rounded) f** |  |  |  |  | **12,200** | | | **$1,390,000** |
| **Total Capital and O&M Cost (rounded) f** |  |  |  |  |  |  |  | **$4,730,000** |
| **Grand TOTAL (rounded) f** |  |  |  |  |  |  |  | **$6,100,000** |
| a We have assumed that there are approximately 40 respondents operating kilns and that 10% of the existing facilities will have new construction/reconstruction. | | | | | | | | |
| b This ICR uses the following labor rates: $147.40 per hour for Executive, Administrative, and Managerial labor; $117.92 per hour for Technical labor, and $57.02 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2018, “Table 2. Civilian Workers, by Occupational and Industry group.” The rates are from column 1, “Total Compensation.” The rates have been increased by 110% to account for the benefit packages available to those employed by private industry. | | | | | | | | |
| c New kilns test for PM, D/F, Hg, HCl, and THC or Total Organic HAP. New raw and finish mills test for opacity. New coolers test for PM. New dryers test for THC or Total Organic HAP. All times for testing include calibration of the CEMS, COMS, or CPMS (temperature, pressure drop, air flow rate, sorbent flow rate, activated carbon injection rate) monitors on this equipment. We have assumed that 5 percent of respondents would repeat initial performance test due to failure. | | | | | | | | |
| d The rule requires existing kilns re-test annually for PM and Hg. New kilns and kilns that were modified or reconstructed after the rule was promulgated must also re-test annually for HCl. All times for testing include calibration of the CEMS or CPMS (pressure drop, air flow rate, sorbent flow rate, activated carbon injection rate) monitors on this equipment. We have assumed that 5 percent of respondents would repeat annual performance test due to failure. | | | | | | | | |
| e Opacity checks are required monthly. Calibration drift checks on the air flow sensor on the Hg CEMS are performed daily. | | | | | | | | |
| f Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding. | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 10: Average Annual EPA Estimated Burden and Cost - NESHAP for Portland Cement Manufacturing Industry (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 | 4 | 96.0 | 4.8 | 9.6 | $5,248.66 |
| Repeat performance test d | 24 | 1 | 4.8 | 0 | 0 | 0 | 0 | $0 |
| Report Review |  |  |  |  |  |  |  |  |
| Notification of construction | 0.5 | 1 | 0.5 | 4 | 2.0 | 0.1 | 0.2 | $109.35 |
| Notification of actual startup | 0.5 | 1 | 0.5 | 4 | 2.0 | 0.1 | 0.2 | $109.35 |
| Notification of performance test e | 0.5 | 1.1 | 0.55 | 44 | 24.2 | 1.2 | 2.4 | $1,323.10 |
| Notification of Physical or Operational   Change | 0.5 | 1 | 0.5 | 4 | 2.0 | 0.1 | 0.2 | $109.35 |
| Review test results/CEMS Results e | 8 | 1 | 8 | 44 | 352.0 | 17.60 | 35.20 | $19,245.07 |
| Review semi-annual summary report | 8 | 2 | 16 | 40 | 640 | 32.0 | 64.0 | $34,991.04 |
| **TOTAL (rounded) f** |  |  |  |  | **1,290** | | | **$61,100** |
|
| **Assumptions:** |  |  |  |  |  |  |  |  |
| a We have assumed that there are approximately 40 respondents with kilns and that 10% of the existing facilities will be re-constructed or modified. | | | | | | | | |
| b This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for government overhead expenses: Managerial rate of $65.71 (GS-13, Step 5, $41.07 + 60%), Technical rate of $48.75 (GS-12, Step 1, $30.47 + 60%), and Clerical rate of $26.38 (GS-6, Step 3, $16.49 + 60%). These rates are from the Office of Personnel Management (OPM) “2018 General Schedule” which excludes locality rates of pay. | | | | | | | | |
| c We have assumed that EPA personnel will attend the initial performance tests for facilities that are re-constructed or modified, but will not attend the annual performance tests for existing facilities. | | | | | | | | |
| d We have assumed that 5 percent of respondents would repeat performance test due to failure, but that EPA would not attend repeat performance tests. | | | | | | | | |
| e Modified or reconstructed facilities conduct initial testing, and existing facilities (kilns and coolers) conduct annual testing. | | | | | | | | |
| f Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding. | | | | | | | | |

1. The direct final rules issued on July 25, 2016 (81 FR 48359), June 23, 2017 (82 FR 28565), and August 22, 2017 (82 FR 39673) included compliance alternatives and did not impose any new information collection burden, or result in any changes to the existing information collection burden. [↑](#footnote-ref-1)
2. The risk and technology review for this source category published on July 25, 2018 (83 FR 35132) reflects corrections and clarifications of the rule requirements and provisions but does not impose any new information collection burden, or result in any changes to the existing information collection burden. [↑](#footnote-ref-2)