

1SUPPORTING STATEMENT
NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR
POLLUTANTS (NESHAP) FOR THE PORTLAND CEMENT
MANUFACTURING INDUSTRY (40 CFR PART 63, SUBPART LLL)

PART A

1.0 Identification of the Information Collection

(a) Title and Number of the Information Collection

“NESHAP for the Portland Cement Manufacturing Industry (40 CFR part 63, subpart LLL) (Final Rule)” - OMB Control Number 2060-0416 and EPA ICR Number 1801.11.

(b) Short Characterization

This ICR covers information collection requirements for the final amendments to the Portland Cement Manufacturing NESHAP (40 CFR part 63, subpart LLL).

The potential respondents are owners or operators of any existing, new, or reconstructed portland cement manufacturing plant. Specifically, these regulations apply to the following affected sources at each new and existing portland cement plant that is a major or area source: each kiln, in-line kiln/raw mill and raw material dryer at these facilities, except for kilns and in-line kiln/raw mills that burn hazardous waste and are subject to 40 CFR 63, subpart EEE. In addition, the rule applies to each new and existing clinker cooler; raw mill; finish mill; raw material, clinker or finished product storage bin; conveying system transfer point; open clinker storage piles; 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.

The final amendments would correct and clarify various rule requirements and provisions. Consistent with a court remand, all kilns burning solid waste (CISWI kilns) were removed from the database used to set the 2010 standards. Revised PM emissions standards and procedures for monitoring compliance with the PM emissions standards are finalized. No

changes were made in the emissions standards for mercury, THC and HCl. The THC alternative organic HAP limit has been revised to address practical quantitation limits of the relevant analytical methods. The final amendments affect the regulation of fugitive emissions from open clinker storage piles, organic hazardous air pollutant (HAP) compliance demonstration, requirements for monitoring hydrochloric acid (HCl) when controlled using dry scrubbers, the equations used to calculate the PM limits, and the affirmative defense for malfunctions. The EPA also granted reconsideration of specific issues relating to startup and shutdown standards and is finalizing a change to the startup and shutdown standards to require work practices during periods of startup and shutdown. In addition, EPA finalized corrections to the rule's testing and monitoring section to correct equations for calculating rolling 30 operating day emissions rates, definitions or procedures that included extraneous wording, incorrect units in equations, cross references and typographical errors in the rule, and editorial revisions in the testing and monitoring requirements to make them easier to read and understand.

The required information collection requirements associated with the final amendments to the NESHAP are listed in Attachment 1.

2.0 Need for and Use of the Collection

(a) Need/Authority for the Collection

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

Provisions for national emission standards for hazardous air pollutants (NESHAP) in 40 CFR part 63, subpart A.

(b) Use/Users of the Data

The information will be used by the delegated authority (state agency, or Regional Administrator if there is no delegated state agency) to ensure that the standards and other requirements are being achieved. Based on review of the recorded information at the site and the reported information, the delegated permitting authority can identify facilities that may not be in compliance and decide which facilities, records or processes may need inspection.

3.0 Nonduplication, Consultations, and Other Collection Criteria

(a) Nonduplication

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

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

Public notice of this ICR was included to the preamble to the proposed and final rules.

(c) Consultations

We did not specifically consult with stakeholders on the ICR requirements of these final amendments. However, all the basic requirements in the final amendments exist in the current rule. Participants in the development process for the current rule included the Portland Cement Association (PCA). Meetings and conference calls with industry representatives were held in the period before and after proposal.

(d) *Effects of Less Frequent Collection*

If the relevant information was collected less frequently, the delegated permitting authority (state or the EPA) will not be reasonably assured that a facility is in compliance with the standards.

(e) *General Guidelines*

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

(f) *Confidentiality*

All information submitted to the Agency for which a claim of confidentiality is made will be safeguarded according to the Agency policies set forth in Title 40, Chapter 1, Part 2, Subpart B-Confidentiality of Business Information (see 40 CFR 2; 41 FR 36902, September 1, 1976; amended by 43 FR 39999, September 28, 1978; 43 FR 42251, September 28, 1978; 44 FR 17674, March 23, 1979).

(g) *Sensitive Questions*

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

4. The Respondents and the Information Requested

(a) *Respondents/NAICS Codes*

Potential respondents under subpart LLL are owners or operators of any existing or new facility engaged in portland cement manufacturing. There are an estimated 87 portland cement manufacturing plants and 133 kilns (approximately 117 existing and 16 new kilns) that would be subject to the final amendments to the NESHAP. All respondents will be subject to the monitoring, recordkeeping, and reporting requirements. The NAICS code for this industry is 327310, Cement Manufacturing.

(b) Information Requested

(i) Data Items, Including Recordkeeping Requirements. Attachment 1, Information Requirements, summarizes the data items, including recordkeeping and reporting requirements, for the portland cement manufacturing source category.

(ii) Respondent Activities. The respondent activities that will be required by the final amendments to the Portland Cement Manufacturing NESHAP are identified in Table 1 and are introduced in section 6(a).

(iii) Summary of Requirements. The EPA is including an estimate of the burden associated with performing an affirmative defense. The EPA is providing this as an illustrative example of the potential additional administrative burden a source may incur to assert an Affirmative Defense in response to an action to enforce the standards set forth in subpart LLL.

This illustrative estimate is not considered a duplicate estimate of cost under the General Duty to Minimize Emissions clause under 40 CFR 63.6(e) (1)(i), which states: “At all times, the owner and operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determining whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.”

To provide the public with an estimate of the relative magnitude of the burden associated with an assertion of the affirmative defense position adopted by a source, the EPA provides an administrative adjustment to this ICR that estimates the costs of the notification, recordkeeping and reporting requirements associated with the assertion of the affirmative defense. The EPA’s estimate for the required notification, reports and records, including the root cause analysis, associated with a single incident totals

approximately \$3,258 and is based on the time and effort required of a source to review relevant data, interview plant employees and document the events surrounding a malfunction that has caused an exceedance of an emission limit. The estimate also includes time to produce and retain the records and reports for submission to the EPA. The EPA provides this illustrative estimate of this burden because these costs are only incurred if there has been a violation and a source chooses to take advantage of the affirmative defense.

In this source category, we estimate that one facility per year will have a control device malfunction that would cause an exceedance of an emission limit and for which the facility would choose to assert the use of the affirmative defense provisions. Thus for this source category, the EPA is assigning annual burden of \$3,258 associated with affirmative defense.

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

(a) Agency Activities

The Agency activities associated with the final amendments to the Portland Cement Manufacturing NESHAP are provided in Table 2 and are introduced in section 6(c).

(b) Collection Methodology and Management

Data and records maintained by the respondents are tabulated and published for use in compliance and enforcement programs of the delegated permitting authority. The EPA is the permitting authority until the state or local agency is delegated authority to implement the final amendments to the rule. Therefore, information contained in any report submitted to the Regional Administrator will be entered into the Air Facility System (AFS), which is operated and maintained by the EPA's Office of Compliance. AFS is the EPA's database for the collection, maintenance, and retrieval of compliance data for approximately 125,000 industrial and government-owned facilities. The EPA uses the AFS for tracking air pollution compliance

and enforcement by local and state regulatory agencies, EPA regional offices and EPA headquarters. The EPA and its delegated authorities can edit, store, retrieve and analyze the compliance data.

(c) Small Entity Flexibility

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

(d) Collection Schedule

The specific frequency for each information collection activity within this request is shown in Table 1.

6. Estimating the Burden and Cost of the Collection

(a) Estimating Respondent Burden.

The annual burden estimates for the final amendments to the Portland Cement Manufacturing NESHAP are shown in Table 1. These numbers were derived from estimates based on the EPA's experience with other standards. These hours are based on Agency studies and background documents from the development of the regulation, Agency knowledge, and experience with the NESHAP program, the previously approved ICR, and any comments received.

(b) *Estimating Respondent Costs*

(i) *Estimating Labor Costs.* Table 1 presents estimated costs for the required data collection activities. Labor rates and associated costs are based on Bureau of Labor Statistics (BLS) data. Technical, management and clerical average hourly rates for private industry workers and were taken from the United States Department of Labor, Bureau of Labor Statistics, September 2011, "Table 2. Civilian Workers, by occupational and industry group," available at www.bls.gov/news.release/ecec.t02.htm. Wages for occupational groups are used as the basis for the labor rates with a total compensation of \$47.21 per hour for technical, \$57.82 per hour for managerial and \$23.72 per hour for clerical. These rates represent salaries plus fringe benefits and do not include the cost of overhead. An overhead rate of 110 percent is used to account for these costs. The fully-burdened hourly wage rates used to represent respondent labor costs are: technical at \$99.14, management at \$121.42 and clerical at \$49.81.

(ii) *Estimating Capital Costs and Operations and Maintenance (O&M) Costs.* Capital costs are estimated at \$35,780 per kiln for purchase and installation of a flow monitoring device for coal mills with stand alone stacks and \$50,800 per kiln for HCl, THC and Hg testing. Facilities would also incur O&M costs for flow meters of \$2,589/yr per facility as a result of the final amendments. An estimated 26 kilns have integrated coal mills with stand alone stacks.

(iv) *Annualizing Capital Costs.*

Annualized capital costs are approximately \$11,275/kiln. Twenty six (26) kilns have integrated coal mills with stand alone stacks.

(iv) Affirmative Defense/Root Cause Analysis/Malfunction Costs. The EPA's estimate for a root cause analysis is based on general experience to calculate the time and effort required of a source to review relevant data, interview plant employees and reconstruct the events prior to a malfunction in order to determine primary and contributing causes. The level of effort also includes time to produce and retain the report in document form so that the source will have it available should the EPA or state enforcement agencies ever request to review it.

(c) Estimating Agency Burden and Cost

Because the information collection requirements were developed as an incidental part of standards development, no costs can be attributed to the development of the information collection requirements. Because reporting and recordkeeping requirements on the part of the respondents are required under the operating permits rules in 40 CFR part 70 or part 71 and the part 63 NESHAP General Provisions, no operational costs will be incurred by the Federal Government. Publication and distribution of the information are part of the Compliance Data System, with the result that no Federal costs can be directly attributed to the ICR. Examination of records to be maintained by the respondents will occur incidentally as part of the periodic inspection of sources that is part of the EPA's overall compliance and enforcement program, and, therefore, is not attributable to the ICR. The only costs that the Federal government will incur are user costs associated with the analysis of the reported information, as presented in Table 2.

The Agency labor rates are from the Office of Personnel Management (OPM) 2012 General Schedule, which excludes locality rates of pay. These rates can be obtained from Salary Table 2012-GS available on the OPM website, http://www.opm.gov/oca/12tables/pdf/g_s_h.pdf. The government employee labor rates are \$15.63/hour for clerical (GS-6, Step 3), \$28.88 for technical (GS-12, Step 1) and \$38.92/hr for management (GS-13, Step 5). These rates were increased by 60 percent to include fringe benefits and overhead. The fully-burdened wage rates used to represent Agency labor

costs are: clerical at \$25.01/hour, technical at \$46.21/hour and management at \$62.27/hour.

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

Approximately 87 portland cement plants are currently subject to the current regulation. Growth in this sector was estimated using data compiled by the Portland Cement Association showing capacity expansion estimates for the industry. Using this information it is estimated that an additional 25 new portland cement kilns will become subject to the regulation over the 5-year NESHAP review period. Thus, it is estimated that an additional 16 portland cement kilns per year will become subject to the regulation over the 3-year ICR period. All 25 new kilns are estimated to be newly constructed at existing portland cement plants.

For the final amendments to the Portland Cement Manufacturing NESHAP, the components of the total annual burden attributable to this ICR include the addition of startup/shutdown plans and fugitive dust plans for open clinker storage piles to a facilities Operation and Maintenance Plan; installation of flow monitors for standalone coal mills; and HCl, THC and Hg testing for standalone coal mills,.

(e) Bottom Line Burden Hours and Cost Tables

(i) Respondent tally. The bottom line respondent burden hours and costs presented in Table 1 are calculated by adding person-hours per year down each column for technical, managerial and clerical staff, and by adding down the cost column. The average annual burden for the recordkeeping and reporting requirements in the final amendments to subpart LLL for the 133 existing kilns that are subject to the Portland Cement Manufacturing NESHAP is 643 person-hours, with an annual average cost of \$62,027. The estimated annual O&M cost as a result of these amendments is \$22,440. Estimated annualized capital cost to the industry for the final amendments is \$97,714, for a total estimated annualized costs (annualized capital and O&M) of \$120,155.

(ii) *The Agency tally.* The average annual Federal Government cost is \$12,023 for 267 hours for the final amendments to subpart LLL. The bottom line Agency burden hours and costs presented in Table 2 are calculated by adding person-hours per year down each column for technical, managerial and clerical staff and by adding down the cost column.

(iii) *Variations in the annual bottom line.* This section does not apply since no significant variation is anticipated.

(f) *Reasons for Change in Burden.*

The increase in burden is primarily due to the additional recordkeeping and reporting costs attributable to the final amendments.

(g) *Burden Statement*

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 74 hours per response. Burden means the total time, effort or financial resources expended by persons to generate, maintain, retain or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install and utilize technology and systems for the purposes of collecting, validating and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR part 63 are listed in 40 CFR part 9.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number

EPA-HQ-OAR-2002-0051, which is available for online viewing at www.regulations.gov, or in person viewing at the Air and Radiation Docket and Information Center in the EPA Docket Center (EPA/DC), EPA West, Room 3334, 1301 Constitution Avenue, NW, Washington, D.C. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket and Information Center is (202) 566-1742. An electronic version of the public docket is available at www.regulations.gov. This site can be used to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. When in the system, select “search,” then key in the Docket ID Number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, D.C. 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OAR-2002-0051 and OMB Control Number 2060-0416 in any correspondence.

PART B

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

**TABLE 1. ANNUAL RESPONDENT BURDEN AND COST - AMENDMENTS TO PORTLAND CEMENT
MANUFACTURING NESHAP**

Burden item	(A) Person- hours per occurrence	(B) No. of occurrence s per respondent	(C) Person- hours per respondent (C=A*B)	(D) Respondent s per year	(E) Technical person- hours per year (E=C*D)	(F) Managemen t person- hours per year (E*0.05)	(G) Clerical person- hours per year (E*0.1)	(H) Cost ^a, \$
1. Applications								
2. Surveys and Studies								
3. Acquisition, Installation, and Utilization of Technology and Systems								
4. Reporting Requirements								
A. Read instructions								
B. Required activities								
C. Create information								
D. Gather existing information								
E. Write report								
F. Affirmative defense reports/analysis ^b	30	1	30	1	30			\$3,258
5. Recordkeeping Requirements								
A. Read instructions								
B. Plan activities								
C. Implement activities								
Revise O&M plan to address startup/shutdown and clinker pile fugitive dust ^c	16	1	16	29.0	464	23	46	\$51,129
Coal mill parameter monitoring ^d	2	4	8	8.7	69	3	7	\$7,640
D. Develop record system								
E. Time to enter information								
F. Time to train personnel								
G. Time to adjust existing ways to comply with previously applicable requirements								
H. Time to transmit or disclose information								
I. Time for audits								
TOTAL LABOR BURDEN AND COST (SALARY)					563	27	53	\$62,027
ANNUAL COSTS (O&M) ^e				8.7				\$22,440
CAPITAL COSTS								

Coal mill testing ^f				8.7				\$440,267
Purchase and installation of flow device ^g				8.7				\$310,091
ANNUALIZED CAPITAL COSTS ^h				8.7				\$97,714
TOTAL ANNUALIZED COSTS (annualized capital cost and annual O&M costs)				8.7				\$120,155

a This ICR uses the following labor rates: \$121.42 for managerial labor, \$99.14 for technical labor, and \$49.81 for clerical labor. These rates are based on the U.S. Department of Labor, Bureau of Labor Statistics, Occupational Employment and Wages, September, 2011.

b See Section 4(b)(iii) above for description of affirmative defense burden.

c Assumed to be a one time event that the facility will have to perform. Assumed all estimated plants (87) will have to comply.

d Costs associated with monitoring and recordkeeping. Twenty six (26) coal mills have stand alone stacks.

e Cost associated with O & M of parameter monitoring device. Twenty six (26) coal mills have stand alone stacks.

f Costs associated with testing of HCl (M321) Hg (M30B) and THC (M25A). Twenty six (26) coal mills have stand alone stacks.

g Cost of purchase and installation of parameter monitoring device. Twenty six (26) coal mills have stand alone stacks.

h Annualized cost of parameter monitoring device. Twenty six (26) coal mills have stand alone stacks. Assumes 10 years, 7 % interest.

**TABLE 2. ANNUAL BURDEN AND COST TO THE AGENCY - AMENDMENTS TO PORTLAND CEMENT
MANUFACTURING NESHAP**

Burden item	(A) Person- hours per occurrence	(B) Occurrences per respondent	(C) EPA person- hours/year (C=A*B)	(D) Facilities per year	(E) Technical person- hours/year (E=C*D)	(F) Management person- hours/year (F=0.05*E)	(G) Clerical person- hours/year (G=0.1*E)	(H) Cost*, \$
Report Review:								
Review performance test reports	4	1	4	29	116	6	12	\$6,012
Review Startup/shutdown plans	4	1	4	29	116	6	12	\$6,012
TOTAL BURDEN AND COST					232	12	23	\$12,023

a This ICR uses the following average hourly labor rates: \$62.27 for managerial (GS-13, Step 5), \$46.21 (GS-12, Step 1) for technical, and \$25.01 (GS-6, Step 3) for clerical. These rates are from the Office of Personnel Management (OPM) 2012 General Schedule, which excludes locality rates of pay.

ATTACHMENT 1. INFORMATION REQUIREMENTS - AMENDMENTS TO PORTLAND CEMENT MANUFACTURING NESHAP

Requirement	Citation for existing sources	Citation for new sources	General Provisions citation
Add startup/shutdown work practice plans to existing Operation and Maintenance Plan	63.1346(f)	63.1346(f)	63.6(e)(3)
Add fugitive dust measures for clinker piles to existing Operation and Maintenance Plan	63.1343(c)	63.1343(c)	63.6(e)