

**SUPPORTING STATEMENT
ENVIRONMENTAL PROTECTION AGENCY**

**National Emission Standards for Hazardous Air Pollutants for Clay Ceramics
Manufacturing
(40 CFR Part 63, Subpart KKKKK)
October 2014**

Part A of the Supporting Statement

1.0 Identification of the Information Collection

1(a) Title and Number of the Information Collection

“National Emission Standards for Hazardous Air Pollutants for Clay Ceramics Manufacturing (40 CFR Part 63, Subpart KKKKK).” This is a new information collection request (ICR). The EPA ICR tracking number is 2510.01.

1(b) Short Characterization

Potential respondents are owners or operators of new and existing sources at clay ceramic manufacturing facilities. A clay ceramics facility manufactures pressed floor tile, pressed wall tile, or sanitaryware (e.g., sinks and toilets). Clay ceramics facilities typically form, dry and fire tile or sanitaryware products that are composed of clay, shale and various additives. Spray dryers are used during the forming process at tile facilities to process the ceramic mix into a powder to allow tile pressing. Dryers are used to reduce the moisture content of the ceramic products prior to firing. Glazes are applied to some tile and sanitaryware products, with glaze spraying accounting for all glazing emissions. Kilns are used to fire the ceramic products and include ceramic tile roller kilns and sanitaryware tunnel and shuttle kilns. The rule applies to all existing, new and reconstructed affected sources, which include the kilns, glaze spray operations, ceramic tile spray dryers and floor tile press dryers. (Wall tile press dryers and sanitaryware ware dryers, with no measurable emissions, are not covered.)

Consistent with the General Provisions for NESHAP for Source Categories (40 CFR part 63, subpart A), respondents do not include the owner or operator of any facility that is not a major source of hazardous air pollutant (HAP) emissions (i.e., an area source). A major source of HAP is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year. There are three clay ceramics facilities that are currently major sources of HAP. No new clay ceramics facilities or affected sources are expected to be constructed in the near future, and existing capacity is assumed to be sufficient to cover any short-term increases in production.

Respondents must submit one-time notifications of applicability and reports on initial performance test results. Respondents must also develop and implement an operation, maintenance and monitoring (OM&M) plan covering each affected source and each emission control device used for compliance with the rule. Semiannual reports for periods of emission limitation deviations (or reports certifying that no deviations have occurred) also are required.

General requirements applicable to all NESHAP include records of applicability determinations, performance test results, deviations, monitoring records and all other information needed to determine compliance with the applicable standard. Records and reports must be retained for a minimum of 5 years. The most recent 2 years of data must be retained onsite. The remaining 3 years of data may be retained offsite.

Subpart KKKKK requires respondents to monitor the type of fuel used and maintain records. Respondents also must monitor control device operating parameters to assure continuous compliance with the rule. The rule includes the following parameter monitoring requirements:

- Tunnel or roller kilns:
 - Dry injection fabric filter (DIFF)/dry lime scrubber/fabric filter (DLS): Lime injection rate and either periodic visible emissions (VE) determinations or bag leak detectors
 - Wet scrubbers: Pressure drop, scrubber liquid pH, scrubber liquid flow rate and chemical addition rate (if applicable)
 - Activated carbon injection: Carbon flow rate
 - No control device: Periodic VE determinations and kiln process rate monitoring (if their last calculated total facility maximum potential hydrogen chloride-equivalent emissions were above the proposed acid gas health-based emission limit)
- Glaze spray operations:
 - Fabric filters: Either periodic VE determinations or bag leak detectors
 - Wet scrubbers: Pressure drop and scrubber liquid flow rate
 - Water curtains: Daily inspections to verify the presence of water flow to the wet control system; weekly visual inspections of the system ductwork and control equipment for leaks and annual inspections of the interior of the control equipment (if applicable) to determine the structural integrity and condition of the control equipment
 - Baffles: Annual visual inspection of the baffles to confirm the baffles are in place
- Spray dryers/floor tile press dryers: Operating temperature

Respondents also must maintain records of specific information needed to determine that the standards are being achieved and maintained.

2. Need For and Use of the Collection

2(a) Need/Authority for the Collection

The EPA is required under section 112(d) of the Clean Air Act (CAA), as amended, to establish emission standards for each category or subcategory of major and area sources of HAP listed for regulation in section 112(b). These standards are applicable to new or existing sources of HAP and shall require the maximum degree of emission reduction. In addition, section 114 of the CAA allows the Administrator to require inspections, monitoring and entry into facilities to ensure compliance with a section 112 emission standard. Section 114(a)(1) specifically states

that the Administrator may require any owner or operator subject to any requirement of the CAA 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; (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.

The predominant HAP emitted from clay ceramics manufacturing facilities include hydrogen fluoride (HF), hydrogen chloride (HCl) and metals (antimony, arsenic, beryllium, cadmium, chromium, cobalt, mercury, manganese, nickel, lead and selenium). In the Administrator's judgment, the pollutants emitted from clay ceramics manufacturing facilities cause or contribute significantly to air pollution that may reasonably be anticipated to endanger public health. Consequently, NESHAP for this source category were promulgated at 40 CFR part 63, subpart KKKKK on May 16, 2003. (Note: The clay ceramics manufacturing source category was originally included in the clay products manufacturing industry source category in the initial list of source categories published on July 16, 1992 (57 FR 31576). The clay ceramics manufacturing source category was subsequently identified as a separate and distinct source category and was added to the list of source categories on July 22, 2002 (67 FR 47894).)

The clay ceramics standards were challenged by the Sierra Club and subsequently vacated by the United States Circuit Court for the District of Columbia on March 13, 2007, due to issues associated with the methodology used to determine the minimum regulatory "floors" for new and existing units. The EPA and Sierra Club later negotiated a consent decree to settle the litigation and set forth proposal and promulgation deadlines for reestablishing standards for this source category. Consequently, new NESHAP for this source category are being proposed.

2(b) Practical Utility/Users of the Data

The information collected from respondents will be used by EPA enforcement personnel to: (1) identify new, modified, reconstructed and existing sources subject to the standards; (2) ensure that maximum achievable control technology (MACT) is being properly applied; and (3) ensure that the emission control devices are being properly operated and maintained on a continuous basis. In addition, records and reports are necessary to enable the EPA to identify facilities that may not be in compliance with the standards. Based on the reported information, the EPA can decide which facilities should be inspected and what records or processes should be inspected at these facilities. The records that facilities maintain will indicate to the EPA whether the owners or operators are in compliance with the emission limitations (including emission limits, operating limits) and work practice standards. Much of the information the EPA would need to determine compliance would be recorded and retained onsite at the facility. Such information would be reviewed by enforcement personnel during an inspection and would not need to be routinely reported to the EPA.

3. Nonduplication, Consultations and Other Collection Criteria

3(a) Nonduplication

The information required by the clay ceramics manufacturing NESHAP is not duplicated by existing EPA regulations and is not expected to be required by any other EPA rulemaking currently in progress. However, certain reports required by state or local agencies may duplicate information required by the standards. In such cases, a copy of the report submitted to the state or local agency may be provided to the Administrator in lieu of the report required by the standards.

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

This section is not applicable because this is a rule-related ICR. Nevertheless, the ICR will be available for public review during the public comment period following publication of the proposed rule in the Federal Register.

3(c) Consultations

Representatives of an industry trade association (Tile Council of North America) and companies in the ceramic tile and sanitaryware industry were consulted during the development of the rule, and several meetings and teleconferences have been held with them during this time. During these meetings, the representatives were given the opportunity to comment on the regulatory approach. The major topics of these discussions included rule applicability, subcategories, testing approach, emissions data, MACT floor approach, confidentiality concerns, source category delisting and alternative standards. No specific information was provided to the representatives with respect to burden estimates. Others consulted for information during the development process for the proposed standards included air pollution control device vendors (Encertec, McGill AirClean, Solios Environment, W.L. Gore and Associates and Cabot Norit Activated Carbon).

The EPA is providing a 60-day public comment period following proposal of the clay ceramics manufacturing NESHAP, during which all affected parties will be given the opportunity to comment on the proposed rule. The EPA will consider the comments received and, as appropriate, incorporate them into the final rule. This ICR will also be revised to incorporate the comments received.

3(d) Effects of Less Frequent Collection

If the relevant information was collected less frequently, the EPA would not be reasonably assured that the facilities are applying good operation and maintenance practices and meeting the emission limitations and work practice standards in the rule. In addition, our authority to take administrative action would be significantly reduced. Section 113(d) of the CAA limits the assessment of administrative penalties to violations which occur no more than 12 months before initiation of the administrative proceeding. Since administrative proceedings are less costly and require use of fewer resources than judicial proceedings, both we and the regulated community benefit from preservation of our administrative powers. Also, the reporting

frequency in the rule is consistent with the requirements of title V permit programs. Consequently, less frequent reports would not result in a reduced burden.

3(e) General Guidelines

The clay ceramics manufacturing NESHAP requires that facilities retain records for a period of 5 years, which exceeds the 3-year retention period specified in the general information collection guidelines in 5 CFR 1320.6(f) of OMB regulations implementing the Paperwork Reduction Act. However, the 5-year retention period is consistent with the retention requirement in the General Provisions in subpart A of 40 CFR part 63 and the retention requirement in the operating permit program under 40 CFR part 70. All facilities subject to this rule will be required to obtain operating permits either through the state-approved permitting program or, if one does not exist, in accordance with the provisions of 40 CFR part 71. Thus, the 5-year record retention requirement of the rule adds no additional burden. At a minimum, respondents will be required to retain onsite the most recent 2 years of data. The remaining 3 years of data could be retained at a readily accessible onsite or offsite storage facility. None of the other guidelines in 5 CFR 1320.6 are being exceeded.

3(f) Confidentiality

All information submitted to the EPA for which a claim of confidentiality is made will be safeguarded according to EPA 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; and 44 FR 17674, March 23, 1979.)

3(g) Sensitive Questions

None of the reporting or recordkeeping requirements contain sensitive questions.

4. The Respondents and the Information Requested

4(a) Respondents/NAICS Codes

The respondents to the recordkeeping and reporting requirements are owners or operators of clay ceramics manufacturing facilities that are major sources of HAP emissions. The North American Industry Classification System (NAICS) codes for respondents affected by the standards are 327110—Pottery, Ceramics, and Plumbing Fixture Manufacturing—and 327120—Clay Building Material and Refractories Manufacturing. Not all processes classified in these NAICS codes are regulated by the standards.

4(b) Information Requested

(i) Data Items, Including Recordkeeping Requirements

All data in this ICR that are recorded and/or reported are required by the NESHAP for Clay Ceramics Manufacturing (40 CFR part 63, subpart KKKKK). The following table summarizes the recordkeeping and reporting requirements under the rule.

Requirements	Rule Citation by Section
Notifications	
Initial notifications (including construction/reconstruction)	63.5, 63.9(b) and 63.8630(a)-(c)
Notification of performance test	63.7(b)-(c), 63.9(e) and 63.8630(d)
Notification of compliance status (including performance test results, operating parameter values, documentation of fuel used, bag leak detection system documentation and OM&M plan)	63.9(h), 63.10(d)(2) and 63.8630(e)
Request for routine control device maintenance exemption	63.8630(f)
Notification of alternative fuel use	63.8630(g)
Records	
Record retention	63.10(b)(1) and 63.8645
Documentation supporting initial notifications and notifications of compliance status	63.10(b)(2)(xiv) and 63.8640(a)(1)
Records of performance tests	63.10(b)(2)(viii) and 63.8640(a)(2)
Records of control device maintenance and documentation of approved routine control device maintenance exemption	63.8640(a)(3)
Records for each continuous monitoring system (CMS), production records, bag leak detection system records, records of operating limit deviations and corrective actions, maintenance and inspection records, records used to demonstrate compliance with work practice standards and malfunction records	63.8(d)(3), 63.8(g), 63.10(b)(2)(iii),(vi)-(xi) and 63.8640(b)-(c)
Records of fuel type used	63.8640(b)
OM&M plan	63.8640(c)(6)
Reports	
First compliance report	63.8635(b)-(f)
Semi-annual compliance report:	63.8635(b)-(f)
-No deviations/no out-of-control CMS	63.8635(c)(5)-(6)
-Deviations/out-of-control CMS	63.8635(d)-(e)
Report of alternative fuel use	63.8635(g)
Electronic submittal of performance test results (using ERT)	63.8635(h)

(ii) Respondent Activities

The respondent activities required by the standards in the first 3 years following the effective date are identified in Tables 1 through 3 and are introduced in Section 6(a).

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

5(a) Agency Activities

The Agency activities in the first 3 years following the effective date of the rule are identified in Tables 5 through 7 and are introduced in Section 6(c).

5(b) Collection Methodology and Management

Following initial notification, the reviewing authority may 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 and ongoing capability to comply with the emission standard and note the operating conditions under which compliance was achieved. 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 will be entered into the Air Facility System (AFS), which is operated and maintained by the EPA's Office of Compliance. The AFS is the EPA's database for the collection, maintenance and retrieval of air compliance data for over 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 data.

The records required by this regulation must be retained by the owner or operator for 5 years.

5(c) Small Entity Flexibility

None of the major source plants in the clay ceramics industry are owned by small businesses based on the definition used by the Small Business Administration for this industry (750 or fewer company employees for NAICS codes 327110 and 327120). Regardless, the EPA does not expect that any facilities in the clay ceramics industry will experience adverse impacts due to the cost of the reporting and recordkeeping requirements of the rule.

5(d) Collection Schedule

Collection of data will begin after the effective date of the final clay ceramics manufacturing NESHAP. The compliance date for existing sources is 3 years after the effective date. The compliance date for new or reconstructed sources is the effective date if the source startup date is before the effective date, or upon startup if the startup date is on or after the effective date. The schedule for notifications and reports required by the rule is summarized below.

For facilities with existing affected sources, the initial notification stating that the facility is subject to the rule must be submitted no later than 120 days after the effective date of the rule. Facilities with new or reconstructed affected sources for which startup occurs on or after the effective date must submit the initial notification no later than 120 days after the source becomes subject to the rule (although we are projecting no new affected sources in the short term). Facilities may choose to submit a request for a routine control device maintenance exemption 30 days prior to the compliance date. Facilities required to conduct a performance test must submit a notification of intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. For each initial compliance demonstration that includes a performance test, facilities must submit an initial notification of compliance status no later than 60 days following the completion of the performance test. For each initial compliance demonstration that does not involve a performance test, facilities must submit an initial notification within 30 days of completing the initial compliance demonstration. Records necessary to determine compliance with the emission limitations and work practice standards must be compiled on a daily basis, and compliance reports must be submitted to the Administrator on a semi-annual basis. Repeat performance tests are to be conducted every 5 years to ensure ongoing compliance.

6. Estimating the Burden and Cost of the Collection

6(a) Estimating Respondent Burden

The annual burden estimates for reporting and recordkeeping activities for the first 3 years after the effective date of the rule are presented in Tables 1 through 3. These numbers were derived from estimates based on Agency studies and background documents from the development of the regulation, Agency knowledge and experience with part 63 and other regulations and the ICR for the 2003 clay ceramics rulemaking. In addition, comments and information received from the Brick Industry Association (BIA) and brick and structural clay products (BSCP) facilities on the 2003 BSCP rulemaking were incorporated into the burden estimates for clay ceramics, given the similarity of the manufacturing processes and proposed regulatory requirements.

6(b) Estimating Respondent Costs

(i) Estimating Labor Costs

The information collection activities for sources subject to the standards are presented in Tables 1 through 3. Labor costs for reporting and recordkeeping activities were estimated based on the most recently available labor rate data from the U.S. Bureau of Labor Statistics (BLS) for NAICS code 327100—Clay Product and Refractory Manufacturing (http://www.bls.gov/oes/2013/may/naics4_327100.htm).¹ Labor costs are divided into the following three categories: (1) technical; (2) management; and (3) clerical. The labor rates, including fringe benefits, reported by BLS for May 2013 (the most recent rates available) are \$25.32 per hour (\$25.32/hr) for technical personnel, \$42.17/hr for management personnel and \$15.19/hr for clerical personnel. The base labor rates were adjusted by an overhead rate of

¹ Occupational employment statistics in BLS are provided at a higher NAICS code level (327100), compared to the NAICS codes (327110 and 327120) specified in Sections 4(a) and 5(c).

110 percent. The final total labor rates are \$53.17 for technical personnel, \$88.56 for management and \$31.90 for clerical.

(ii) Estimating Capital/Startup and O&M Costs

Capital/startup costs include the costs of conducting initial and repeat performance tests. Operation and maintenance (O&M) costs include photocopy and postage costs associated with reporting requirements and costs associated with VE monitoring. The O&M costs for VE monitoring include training for VE testing for two people every 5 years, conducting the 15-minute VE test and preparing for/documenting the VE test. The monitoring equipment needed to monitor parameters other than VE (e.g., lime feed rate) is included as part of the control system and, therefore, adds no additional capital or O&M cost. The capital/startup costs were estimated and annualized as described in Tables 1 through 3.

6(c) *Estimating Agency Burden and Cost*

No costs can be attributed to the development of the information collection requirements because the information collection requirements were developed as an incidental part of standards development. Because reporting and recordkeeping requirements on the part of the respondents are required under section 112 of the CAA, no operational costs will be incurred by the federal government. Publication and distribution of the information are part of the AFS program, 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. Therefore, this examination is not attributable to the ICR. The only costs that the federal government will incur are user costs associated with the analysis of the reported information, as presented in Tables 5 through 7.

Labor rates for federal employees are based on the January 2012, Office of Personnel Management labor rates for General Schedule employees (http://www.opm.gov/oca/12tables/pdf/gs_h.pdf). The base labor rates are \$32.73/hr for technical personnel (GS-12, step 5), \$54.10/hr for management personnel (GS-15, step 5) and \$18.45/hr for clerical personnel (GS-7, step 5). The base labor rates were multiplied by the standard government benefits multiplication factor of 1.6. The resulting average hourly labor costs are \$52.37/hr for technical personnel, \$86.56/hr for management and \$29.52/hr for clerical.

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

Once the burden and costs per activity have been established on a per respondent basis, the total burden and cost must be calculated for all respondents and for the Agency. To calculate the total burden and costs, the number of respondents needed to complete each information collection activity must be estimated. The total number of respondents is also referred to as the "respondent universe." The EPA has identified three major source facilities that will be subject to the clay ceramics rule. No new clay ceramics facilities or affected sources are expected to be constructed in the near future, and existing capacity is assumed to be sufficient to cover any short-term increases in production.

6(e) *Bottom Line Burden Hours and Costs/Master Tables*

(i) Respondent Tally

The bottom line annual respondent burden hours and costs, presented in Tables 1 through 3 (one table for each year), are calculated by adding person-hours per year down each column for technical, managerial and clerical staff, and by adding down the cost column. Table 4 summarizes the respondent burden hours and costs for each of the 3 years and presents the total and average burden over the 3-year period. The total number of responses over the 3-year period is 6, with an average of 2.0 responses per year. The estimated total burden for the 3-year period is 2,023 labor hours at a labor cost of \$106,960. The average bottom line annual burden over the 3-year period is 674 labor hours at a labor cost of \$35,653. There are no capital/startup costs that would be incurred during the 3 years following the effective date of the rule. The total annual O&M cost for the 3-year period is estimated to be \$132, with an average of \$44 incurred each year in the 3 years following the effective date.

(ii) The Agency Tally

The bottom line Agency burden hours and costs, presented in Tables 5 through 7, are calculated as in the respondent table, by adding person-hours per year down each column for technical, managerial and clerical staff, and by adding down the cost column. In this case, total cost is the sum of this total salary cost and total travel expenses for tests attended. Table 8 summarizes the Agency burden hours and costs for each of the 3 years and presents the total and average burden over the 3-year period. The total hours during the 3-year ICR review period are 14, with an average of 4.6 hours per year. The total cost over the 3-year period is \$716. The average annual cost incurred during each year is \$239.

(iii) Variations in the Annual Bottom Line

Respondent and Agency costs and labor hours vary from year to year because: (1) existing facilities are not required to come into full compliance with the clay ceramics standards until 3 years after the effective date of the rule and (2) different one-time activities would be conducted during the first years following the effective date. During the first year, existing sources are required to submit an initial notification. There are no monitoring, reporting and recordkeeping activities during the second year for existing sources. In the third year, existing facilities are likely to be conducting one-time activities such as developing their OM&M plans, developing a record system and training personnel on how to record information. Facilities may also choose to submit a request for a routine control device maintenance exemption during the third year.

Because existing facilities are not required to come into full compliance with the clay ceramics standards until 3 years after the effective date, much of the respondent burden does not occur until the fourth year following the effective date. Attachment 1 contains tables showing respondent and Agency burden estimates for the fourth, fifth and sixth years following the effective date. During the fourth year when existing facilities are required to come into full compliance, the facilities would conduct inspections, submit a notification of intent to conduct a performance test, conduct an initial performance test (and, if necessary, a repeat performance

test), submit notifications of compliance status and alternative fuel use, submit their test data to the EPA through the EPA's electronic reporting tool (ERT), submit their first compliance report and keep records of compliance data, alternative fuel use and malfunctions. During subsequent years, existing facilities would continue to keep records and submit semi-annual reports. After the fourth year, burden estimates are not expected to vary considerably from year to year because facilities will be conducting ongoing activities (e.g., semi-annual compliance reports, recordkeeping, inspecting every 3 years, retesting every 5 years) as opposed to the one-time activities (e.g., developing OM&M plan, submitting notifications) that occur in the first 4 years following the effective date.

6(f) Reasons for Change in Burden

This section does not apply because this is a new collection.

6(g) Burden Statement

The average annual public reporting and recordkeeping burden for this collection of information is estimated to average 337 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 are listed in 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, the EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OAR-2013-0290. 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 content of the docket and to access those documents in the public docket that are available electronically. When in the system, select "search" than key in the docket ID number identified in this document. The documents are also available for public viewing at the EPA Docket Center, Room 3334, EPA WJC West Building, 1301 Constitution Avenue, NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the docket center is (202) 566-1742. Send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, Attention: Desk Officer for EPA, 725 17th Street, NW, Washington, DC 20503. Please include the EPA Docket ID Number EPA-HQ-OAR-2013-0290 in any correspondence.

Part B of the Supporting Statement

This part is not applicable because statistical methods are not used in data collection associated with the rule.

Table 1. Annual Respondent Burden and Cost of Reporting and Recordkeeping Requirements of the Clay Ceramics NESHAP - Year 1

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person-hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person-hours per year (E×0.1)	(H) Cost,\$ ^b
1. Applications	N/A							
2. Survey and Studies	N/A							
3. Reporting Requirements								
A. Read and understand rule requirements	2	1	2	3	6.0	0.3	0.6	\$365
B. Required activities								
Develop OM&M plan ^{c,d}	100	1	100	0	0	0	0	\$0
Conduct APCD maintenance/inspections	20	1	20	0	0	0	0	\$0
Conduct shuttle kiln maintenance/inspections	20	1	20	0	0	0	0	\$0
C. Create information	See 3B							
D. Gather existing information	See 3B							
E. Write report								
Initial notification of applicability ^d	2	1	2	3	6.0	0.3	0.6	\$365
Notification of constr./reconstr. ^d	2	1	2	0	0	0	0	\$0
Notification of anticipated startup ^d	2	1	2	0	0	0	0	\$0
Notification of actual startup ^d	2	1	2	0	0	0	0	\$0
Request APCD maintenance exemption ^d	2	1	2	0	0	0	0	\$0
Notification of performance test	2	1	2	0	0	0	0	\$0
Notification of compliance status ^e	16	1	16	0	0	0	0	\$0
Report of performance test (through ERT)	4	1	4	0	0	0	0	\$0
Notification of alternative fuel use ^f	2	1	2	0	0	0	0	\$0
First compliance report	16	1	16	0	0	0	0	\$0
Semi-annual compliance reports								
Deviations ^g	20	2	40	0	0	0	0	\$0

Burden item	(A) Person- hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person- hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person- hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person- hours per year (E×0.1)	(H) Cost,\$ ^b
No deviations ^g	8	2	16	0	0	0	0	\$0
Report of alternative fuel use ^f	4	2	8	0	0	0	0	\$0
4. Recordkeeping Requirements								
A. Read instructions	See 3A							
B. Plan activities								
Prepare for initial performance test ^c	24	1	24	0	0	0	0	\$0
Prepare for repeat performance test ^c	24	1	24	0	0	0	0	\$0
C. Implement activities								
Attend initial performance test ^{c,h}	24	2.5	60	0	0	0	0	\$0
Attend repeat performance test ^{c,h}	24	2.5	60	0	0	0	0	\$0
D. Develop record system	40	6	240	0	0	0	0	\$0
E. Time to enter information								
Records of compliance data ^c	6	52	312	0	0	0	0	\$0
Records of alternative fuel use	1	12	12	0	0	0	0	\$0
Records of APCD maintenance/inspections	See 3B							
Records of compliance with work practices	See 3B							
Records of malfunctions	2	12	24	0	0	0	0	\$0
F. Time to train personnel ^{c,i}	40	6	240	0	0	0	0	\$0
G. Time to transmit/disclose information ^j	0.25	1	0.25	3	0.8	0.04	0.08	\$46
TOTAL ANNUAL BURDEN AND COST (SALARY)					13	0.6	1.3	\$775
TOTAL ANNUAL NUMBER OF RESPONSES ^k				3				

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person-hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person-hours per year (E×0.1)	(H) Cost,\$ ^b
CAPITAL COSTS:								
Initial performance tests ¹								\$0
Repeat performance tests ^m								\$0
Total capital cost								\$0
ANNUALIZED CAPITAL COSTS:ⁿ								
Initial performance tests								\$0
Repeat performance tests								\$0
Total annualized capital cost								\$0
ANNUAL O&M COSTS^o								
Photocopy/postage								\$66
Visible emissions tests								\$0
Total O&M cost								\$66
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								\$66

^a A total of three existing major sources (all sanitaryware) are expected to comply during the 3-year ICR clearance period. No new kilns are anticipated to be constructed in the near future, and existing capacity is assumed sufficient to cover any short-term increases in production.

^b Costs are based on the following hourly rates: technical at \$53.17, management at \$88.56 and clerical at \$31.90. Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.

^c Person-hours per occurrence and number of occurrences per year were derived based on comments from BIA.

^d One-time only activities.

^e The notification of compliance status includes the performance test report. The cost burden associated with developing the performance test report is included in the performance test capital cost at the bottom of the table.

^f Assumes 10% of facilities will use an alternative fuel once per year.

^g Assumes 15% of respondents have deviations to report in semiannual compliance reports and 85% report no deviations.

^h Assumes 10% of plants fail initial performance test and must repeat it. Based on comments from BIA, an average of 2.5 plant personnel attend performance tests. Assume no travel for plant personnel. Assume testing takes 2, 12-hour days per plant. Repeat testing is also required 5 years following initial testing.

ⁱ Based on comments from BIA, assumes 40 hours of training for 6 plant personnel.

^j Time associated with transmitting reports. Equal to the number of respondents submitting reports.

^k The total annual number of responses is calculated by summing the product of columns B and D for each of the reports listed in 3E.

^l Assumes EPA Method 5 for PM, EPA Method 29 for metals, EPA Method 26A for HF and HCl and EPA Method 23 for dioxins/furans.

^m Assumes 10% of plants will fail an initial performance test and must repeat it.

ⁿ Annualized costs are calculated by multiplying the capital recovery factor (CRF) by the capital cost. $CRF = i * (1+i)^t / ((1+i)^t - 1)$ where i = interest rate (%) and t = equipment life (years). Performance testing costs annualized assuming a 5 year life and 7 percent interest.

^o O&M costs for photocopying and postage estimated as \$22/report. The monitoring equipment needed to monitor parameters other than visible emissions (e.g., limestone or lime feed rate) is included as part of the control system and therefore adds no additional capital or O&M cost. The O&M cost associated with VE monitoring includes VE training for two people every 5 years, conducting the 15-minute VE test and preparing for/documenting the VE test (occurs after 3-year ICR clearance period).

N/A = Not Applicable.

Table 2. Annual Respondent Burden and Cost of Reporting and Recordkeeping Requirements of the Clay Ceramics NESHAP - Year 2

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person-hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person-hours per year (E×0.1)	(H) Cost,\$ ^b
1. Applications	N/A							
2. Survey and Studies	N/A							
3. Reporting Requirements								
A. Read and understand rule requirements	2	1	2	0	0	0	0	\$0
B. Required activities								
Develop OM&M plan ^{c,d}	100	1	100	0	0	0	0	\$0
Conduct APCD maintenance/inspections	20	1	20	0	0	0	0	\$0
Conduct shuttle kiln maintenance/inspections	20	1	20	0	0	0	0	\$0
C. Create information	See 3B							
D. Gather existing information	See 3B							
E. Write report								
Initial notification of applicability ^d	2	1	2	0	0	0	0	\$0
Notification of constr./reconstr. ^d	2	1	2	0	0	0	0	\$0
Notification of anticipated startup ^d	2	1	2	0	0	0	0	\$0
Notification of actual startup ^d	2	1	2	0	0	0	0	\$0
Request APCD maintenance exemption ^d	2	1	2	0	0	0	0	\$0
Notification of performance test	2	1	2	0	0	0	0	\$0
Notification of compliance status ^e	16	1	16	0	0	0	0	\$0
Report of performance test (through ERT)	4	1	4	0	0	0	0	\$0
Notification of alternative fuel use ^f	2	1	2	0	0	0	0	\$0
First compliance report	16	1	16	0	0	0	0	\$0
Semi-annual compliance reports								
Deviations ^g	20	2	40	0	0	0	0	\$0

Burden item	(A) Person- hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person- hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person- hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person- hours per year (E×0.1)	(H) Cost,\$ ^b
No deviations ^g	8	2	16	0	0	0	0	\$0
Report of alternative fuel use ^f	4	2	8	0	0	0	0	\$0
4. Recordkeeping Requirements								
A. Read instructions	See 3A							
B. Plan activities								
Prepare for initial performance test ^c	24	1	24	0	0	0	0	\$0
Prepare for repeat performance test ^c	24	1	24	0	0	0	0	\$0
C. Implement activities								
Attend initial performance test ^{c,h}	24	2.5	60	0	0	0	0	\$0
Attend repeat performance test ^{c,h}	24	2.5	60	0	0	0	0	\$0
D. Develop record system	40	6	240	0	0	0	0	\$0
E. Time to enter information								
Records of compliance data ^c	6	52	312	0	0	0	0	\$0
Records of alternative fuel use	1	12	12	0	0	0	0	\$0
Records of APCD maintenance/inspections	See 3B							
Records of compliance with work practices	See 3B							
Records of malfunctions	2	12	24	0	0	0	0	\$0
F. Time to train personnel ^{c,i}	40	6	240	0	0	0	0	\$0
G. Time to transmit/disclose information ^j	0.25	1	0.25	0	0	0	0	\$0
TOTAL ANNUAL BURDEN AND COST (SALARY)					0	0	0	\$0
TOTAL ANNUAL NUMBER OF RESPONSES ^k				0				

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person-hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person-hours per year (E×0.1)	(H) Cost,\$ ^b
CAPITAL COSTS:								
Initial performance tests ¹								\$0
Repeat performance tests ^m								\$0
Total capital cost								\$0
ANNUALIZED CAPITAL COSTS:ⁿ								
Initial performance tests								\$0
Repeat performance tests								\$0
Total annualized capital cost								\$0
ANNUAL O&M COSTS^o								
Photocopy/postage								\$0
Visible emissions tests								\$0
Total O&M cost								\$0
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								\$0

^a A total of three existing major sources (all sanitaryware) are expected to comply during the 3-year ICR clearance period. No new kilns are anticipated to be constructed in the near future, and existing capacity is assumed sufficient to cover any short-term increases in production.

^b Costs are based on the following hourly rates: technical at \$53.17, management at \$88.56 and clerical at \$31.90. Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.

^c Person-hours per occurrence and number of occurrences per year were derived based on comments from BIA.

^d One-time only activities.

^e The notification of compliance status includes the performance test report. The cost burden associated with developing the performance test report is included in the performance test capital cost at the bottom of the table.

^f Assumes 10% of facilities will use an alternative fuel once per year.

^g Assumes 15% of respondents have deviations to report in semiannual compliance reports and 85% report no deviations.

^h Assumes 10% of plants fail initial performance test and must repeat it. Based on comments from BIA, an average of 2.5 plant personnel attend performance tests. Assume no travel for plant personnel. Assume testing takes 2, 12-hour days per plant. Repeat testing is also required 5 years following initial testing.

ⁱ Based on comments from BIA, assumes 40 hours of training for 6 plant personnel.

^j Time associated with transmitting reports. Equal to the number of respondents submitting reports.

^k The total annual number of responses is calculated by summing the product of columns B and D for each of the reports listed in 3E.

^l Assumes EPA Method 5 for PM, EPA Method 29 for metals, EPA Method 26A for HF and HCl and EPA Method 23 for dioxins/furans.

^m Assumes 10% of plants will fail an initial performance test and must repeat it.

ⁿ Annualized costs are calculated by multiplying the capital recovery factor (CRF) by the capital cost. $CRF = i * (1+i)^t / ((1+i)^t - 1)$ where i = interest rate (%) and t = equipment life (years). Performance testing costs annualized assuming a 5 year life and 7 percent interest.

^o O&M costs for photocopying and postage estimated as \$22/report. The monitoring equipment needed to monitor parameters other than visible emissions (e.g., limestone or lime feed rate) is included as part of the control system and therefore adds no additional capital or O&M cost. The O&M cost associated with VE monitoring includes VE training for two people every 5 years, conducting the 15-minute VE test and preparing for/documenting the VE test (occurs after 3-year ICR clearance period).

N/A = Not Applicable.

Table 3. Annual Respondent Burden and Cost of Reporting and Recordkeeping Requirements of the Clay Ceramics NESHAP - Year 3

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person-hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person-hours per year (E×0.1)	(H) Cost,\$ ^b
1. Applications	N/A							
2. Survey and Studies	N/A							
3. Reporting Requirements								
A. Read and understand rule requirements	2	1	2	0	0	0	0	\$0
B. Required activities								
Develop OM&M plan ^{c,d}	100	1	100	3	300	15	30	\$18,237
Conduct APCD maintenance/inspections	20	1	20	0	0	0	0	\$0
Conduct shuttle kiln maintenance/inspections	20	1	20	0	0	0	0	\$0
C. Create information	See 3B							
D. Gather existing information	See 3B							
E. Write report								
Initial notification of applicability ^d	2	1	2	0	0	0	0	\$0
Notification of constr./reconstr. ^d	2	1	2	0	0	0	0	\$0
Notification of anticipated startup ^d	2	1	2	0	0	0	0	\$0
Notification of actual startup ^d	2	1	2	0	0	0	0	\$0
Request APCD maintenance exemption ^d	2	1	2	3	6.0	0.3	0.6	\$365
Notification of performance test	2	1	2	0	0	0	0	\$0
Notification of compliance status ^e	16	1	16	0	0	0	0	\$0
Report of performance test (through ERT)	4	1	4	0	0	0	0	\$0
Notification of alternative fuel use ^f	2	1	2	0	0	0	0	\$0
First compliance report	16	1	16	0	0	0	0	\$0
Semi-annual compliance reports								
Deviations ^g	20	2	40	0	0	0	0	\$0

Burden item	(A) Person- hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person- hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person- hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person- hours per year (E×0.1)	(H) Cost,\$ ^b
No deviations ^g	8	2	16	0	0	0	0	\$0
Report of alternative fuel use ^f	4	2	8	0	0	0	0	\$0
4. Recordkeeping Requirements								
A. Read instructions	See 3A							
B. Plan activities								
Prepare for initial performance test ^c	24	1	24	0	0	0	0	\$0
Prepare for repeat performance test ^c	24	1	24	0	0	0	0	\$0
C. Implement activities								
Attend initial performance test ^{c,h}	24	2.5	60	0	0	0	0	\$0
Attend repeat performance test ^{c,h}	24	2.5	60	0	0	0	0	\$0
D. Develop record system	40	6	240	3	720	36	72	\$43,769
E. Time to enter information								
Records of compliance data ^c	6	52	312	0	0	0	0	\$0
Records of alternative fuel use	1	12	12	0	0	0	0	\$0
Records of APCD maintenance/inspections	See 3B							
Records of compliance with work practices	See 3B							
Records of malfunctions	2	12	24	0	0	0	0	\$0
F. Time to train personnel ^{c,i}	40	6	240	3	720	36	72	\$43,769
G. Time to transmit/disclose information ^j	0.25	1	0.25	3	0.8	0.04	0.08	\$46
TOTAL ANNUAL BURDEN AND COST (SALARY)					1,747	87	175	\$106,184
TOTAL ANNUAL NUMBER OF RESPONSES ^k				3				

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person-hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person-hours per year (E×0.1)	(H) Cost,\$ ^b
CAPITAL COSTS:								
Initial performance tests ¹								\$0
Repeat performance tests ^m								\$0
Total capital cost								\$0
ANNUALIZED CAPITAL COSTS:ⁿ								
Initial performance tests								\$0
Repeat performance tests								\$0
Total annualized capital cost								\$0
ANNUAL O&M COSTS^o								
Photocopy/postage								\$66
Visible emissions tests								\$0
Total O&M cost								\$66
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								\$66

^a A total of three existing major sources (all sanitaryware) are expected to comply during the 3-year ICR clearance period. No new kilns are anticipated to be constructed in the near future, and existing capacity is assumed sufficient to cover any short-term increases in production.

^b Costs are based on the following hourly rates: technical at \$53.17, management at \$88.56 and clerical at \$31.90. Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.

^c Person-hours per occurrence and number of occurrences per year were derived based on comments from BIA.

^d One-time only activities.

^e The notification of compliance status includes the performance test report. The cost burden associated with developing the performance test report is included in the performance test capital cost at the bottom of the table.

^f Assumes 10% of facilities will use an alternative fuel once per year.

^g Assumes 15% of respondents have deviations to report in semiannual compliance reports and 85% report no deviations.

^h Assumes 10% of plants fail initial performance test and must repeat it. Based on comments from BIA, an average of 2.5 plant personnel attend performance tests. Assume no travel for plant personnel. Assume testing takes 2, 12-hour days per plant. Repeat testing is also required 5 years following initial testing.

ⁱ Based on comments from BIA, assumes 40 hours of training for 6 plant personnel.

^j Time associated with transmitting reports. Equal to the number of respondents submitting reports.

^k The total annual number of responses is calculated by summing the product of columns B and D for each of the reports listed in 3E.

^l Assumes EPA Method 5 for PM, EPA Method 29 for metals, EPA Method 26A for HF and HCl and EPA Method 23 for dioxins/furans.

^m Assumes 10% of plants will fail an initial performance test and must repeat it.

ⁿ Annualized costs are calculated by multiplying the capital recovery factor (CRF) by the capital cost. $CRF = i * (1+i)^t / ((1+i)^t - 1)$ where i = interest rate (%) and t = equipment life (years). Performance testing costs annualized assuming a 5 year life and 7 percent interest.

^o O&M costs for photocopying and postage estimated as \$22/report. The monitoring equipment needed to monitor parameters other than visible emissions (e.g., limestone or lime feed rate) is included as part of the control system and therefore adds no additional capital or O&M cost. The O&M cost associated with VE monitoring includes VE training for two people every 5 years, conducting the 15-minute VE test and preparing for/documenting the VE test (occurs after 3-year ICR clearance period).

N/A = Not Applicable.

Table 4. Summary of Respondent Burden and Cost of the Clay Ceramics NESHAP - Years 1 to 3

Year	No. responses	Technical hours	Management hours	Clerical Hours	Total hours	Labor costs	Non-Labor Costs			
							Capital	Annualized capital	Annual O&M	Total annualized cost
Year 1	3	13	0.6	1.3	15	\$775	\$0	\$0	\$66	\$66
Year 2	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0
Year 3	3	1,747	87	175	2,009	\$106,184	\$0	\$0	\$66	\$66
Totals	6	1,760	88	176	2,023	\$106,960	\$0	\$0	\$132	\$132
Average	2.0				674	\$35,653	\$0	\$0	\$44	\$44

Table 5. Annual Burden and Cost to the Federal Government of the Clay Ceramics NESHAP - Year 1

Activity	(A) EPA person- hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person- hours per plant per year (C=AxB)	(D) Plants per year ^a	(E) Technical person- hours per year (E=CxD)	(F) Management person-hours per year (E×0.05)	(G) Clerical person- hours per year (E×0.1)	(H) Cost,\$ ^b
1. Attend initial performance test ^c	24	1	24	0	0	0	0	\$0
2. Attend repeat performance test ^{c,d}								
Retesting preparation	8	1	8	0	0	0	0	\$0
Retesting	24	1	24	0	0	0	0	\$0
3. Litigation ^e	2,080	1	2,080	0	0	0	0	\$0
4. Excess emissions enforcement activities ^f	48	1	48	0	0	0	0	\$0
5. Report review								
Initial notification of applicability	2	1	2	3	6.0	0.3	0.6	\$358
Notification of constr./reconstr.	2	1	2	0	0	0	0	\$0
Notification of anticipated startup	2	1	2	0	0	0	0	\$0
Notification of actual startup	2	1	2	0	0	0	0	\$0
Request for APCD maintenance exemption	2	1	2	0	0	0	0	\$0
Notification of performance test	2	1	2	0	0	0	0	\$0
Notification of compliance status ^g	60	1	60	0	0	0	0	\$0
Notification of alternative fuel use	2	1	2	0	0	0	0	\$0
Repeat performance test report ^d	40	1	40	0	0	0	0	\$0
First compliance report	4	1	4	0	0	0	0	\$0
Semi-annual compliance reports:								
Deviations ^h	8	2	16	0	0	0	0	\$0
No deviations ^h	2	2	4	0	0	0	0	\$0
Report of alternative fuel use ⁱ	1	1	1	0	0	0	0	\$0
TOTAL BURDEN AND COST (SALARY)					6.0	0.3	0.6	\$358
Travel Expenses for Tests Attended ^j								\$0
TOTAL ANNUAL COST (SALARY + EXPENSES)								\$358

- ^a A total of three existing major sources (all sanitaryware) are expected to comply during the 3-year ICR clearance period. No new kilns are anticipated to be constructed in the near future, and existing capacity is assumed sufficient to cover any short-term increases in production.
- ^b Costs are based on the following hourly rates: technical at \$52.37, management at \$86.56 and clerical at \$29.52. Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.
- ^c Assumes Agency personnel will attend performance tests at 10% of plants.
- ^d Assumes 10% of plants will fail an initial performance test and must repeat it and assumes Agency personnel attend 10% of the repeat tests.
- ^e Assumes 1% of plants will be involved in litigation.
- ^f Assumes 5% of the plants are required to retest as a result of excess emissions and assumes Agency personnel attend all of the retests.
- ^g Notification of compliance status includes the performance test report.
- ^h Assumes 15% of the plants report deviations semiannually and 85% report no deviations.
- ⁱ Assumes 10% of facilities will use an alternative fuel once per year.
- ^j Assumes Agency personnel (1 person) will spend 2 days per plant plus time for travel, at \$50 per diem per day, and \$400 transportation expense per round trip to attend performance tests.
- N/A = Not applicable.

Table 6. Annual Burden and Cost to the Federal Government of the BSCP NESHP - Year 2

Activity	(A) EPA person- hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person- hours per plant per year (C=AxB)	(D) Plants per year ^a	(E) Technical person- hours per year (E=CxD)	(F) Management person-hours per year (E×0.05)	(G) Clerical person- hours per year (E×0.1)	(H) Cost,\$ ^b
1. Attend initial performance test ^c	24	1	24	0	0	0	0	\$0
2. Attend repeat performance test ^{c,d}								
Retesting preparation	8	1	8	0	0	0	0	\$0
Retesting	24	1	24	0	0	0	0	\$0
3. Litigation ^e	2,080	1	2,080	0	0	0	0	\$0
4. Excess emissions enforcement activities ^f	48	1	48	0	0	0	0	\$0
5. Report review								
Initial notification of applicability	2	1	2	0	0	0	0	\$0
Notification of constr./reconstr.	2	1	2	0	0	0	0	\$0
Notification of anticipated startup	2	1	2	0	0	0	0	\$0
Notification of actual startup	2	1	2	0	0	0	0	\$0
Request for APCD maintenance exemption	2	1	2	0	0	0	0	\$0
Notification of performance test	2	1	2	0	0	0	0	\$0
Notification of compliance status ^g	60	1	60	0	0	0	0	\$0
Notification of alternative fuel use	2	1	2	0	0	0	0	\$0
Repeat performance test report ^d	40	1	40	0	0	0	0	\$0
First compliance report	4	1	4	0	0	0	0	\$0
Semi-annual compliance reports:								
Deviations ^h	8	2	16	0	0	0	0	\$0
No deviations ^h	2	2	4	0	0	0	0	\$0
Report of alternative fuel use ⁱ	1	1	1	0	0	0	0	\$0
TOTAL BURDEN AND COST (SALARY)					0	0	0	\$0
Travel Expenses for Tests Attended ^j								\$0
TOTAL ANNUAL COST (SALARY + EXPENSES)								\$0

- ^a A total of three existing major sources (all sanitaryware) are expected to comply during the 3-year ICR clearance period. No new kilns are anticipated to be constructed in the near future, and existing capacity is assumed sufficient to cover any short-term increases in production.
- ^b Costs are based on the following hourly rates: technical at \$52.37, management at \$86.56 and clerical at \$29.52. Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.
- ^c Assumes Agency personnel will attend performance tests at 10% of plants.
- ^d Assumes 10% of plants will fail an initial performance test and must repeat it and assumes Agency personnel attend 10% of the repeat tests.
- ^e Assumes 1% of plants will be involved in litigation.
- ^f Assumes 5% of the plants are required to retest as a result of excess emissions and assumes Agency personnel attend all of the retests.
- ^g Notification of compliance status includes the performance test report.
- ^h Assumes 15% of the plants report deviations semiannually and 85% report no deviations.
- ⁱ Assumes 10% of facilities will use an alternative fuel once per year.
- ^j Assumes Agency personnel (1 person) will spend 2 days per plant plus time for travel, at \$50 per diem per day, and \$400 transportation expense per round trip to attend performance tests.
- N/A = Not applicable.

Table 7. Annual Burden and Cost to the Federal Government of the BSCP NESHAP - Year 3

Activity	(A) EPA person- hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person- hours per plant per year (C=AxB)	(D) Plants per year ^a	(E) Technical person- hours per year (E=CxD)	(F) Management person-hours per year (E×0.05)	(G) Clerical person- hours per year (E×0.1)	(H) Cost,\$ ^b
1. Attend initial performance test ^c	24	1	24	0	0	0	0	\$0
2. Attend repeat performance test ^{c,d}								
Retesting preparation	8	1	8	0	0	0	0	\$0
Retesting	24	1	24	0	0	0	0	\$0
3. Litigation ^e	2,080	1	2,080	0	0	0	0	\$0
4. Excess emissions enforcement activities ^f	48	1	48	0	0	0	0	\$0
5. Report review								
Initial notification of applicability	2	1	2	0	0	0	0	\$0
Notification of constr./reconstr.	2	1	2	0	0	0	0	\$0
Notification of anticipated startup	2	1	2	0	0	0	0	\$0
Notification of actual startup	2	1	2	0	0	0	0	\$0
Request for APCD maintenance exemption	2	1	2	3	6.0	0.3	0.6	\$358
Notification of performance test	2	1	2	0	0	0	0	\$0
Notification of compliance status ^g	60	1	60	0	0	0	0	\$0
Notification of alternative fuel use	2	1	2	0	0	0	0	\$0
Repeat performance test report ^d	40	1	40	0	0	0	0	\$0
First compliance report	4	1	4	0	0	0	0	\$0
Semi-annual compliance reports:								
Deviations ^h	8	2	16	0	0	0	0	\$0
No deviations ^h	2	2	4	0	0	0	0	\$0
Report of alternative fuel use ⁱ	1	1	1	0	0	0	0	\$0
TOTAL BURDEN AND COST (SALARY)					6.0	0.3	0.6	\$358
Travel Expenses for Tests Attended ^j								\$0
TOTAL ANNUAL COST (SALARY + EXPENSES)								\$358

- ^a A total of three existing major sources (all sanitaryware) are expected to comply during the 3-year ICR clearance period. No new kilns are anticipated to be constructed in the near future, and existing capacity is assumed sufficient to cover any short-term increases in production.
- ^b Costs are based on the following hourly rates: technical at \$52.37, management at \$86.56 and clerical at \$29.52. Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.
- ^c Assumes Agency personnel will attend performance tests at 10% of plants.
- ^d Assumes 10% of plants will fail an initial performance test and must repeat it and assumes Agency personnel attend 10% of the repeat tests.
- ^e Assumes 1% of plants will be involved in litigation.
- ^f Assumes 5% of the plants are required to retest as a result of excess emissions and assumes Agency personnel attend all of the retests.
- ^g Notification of compliance status includes the performance test report.
- ^h Assumes 15% of the plants report deviations semiannually and 85% report no deviations.
- ⁱ Assumes 10% of facilities will use an alternative fuel once per year.
- ^j Assumes Agency personnel (1 person) will spend 2 days per plant plus time for travel, at \$50 per diem per day, and \$400 transportation expense per round trip to attend performance tests.
- N/A = Not applicable.

Table 8. Summary of Burden and Cost to the Federal Government of the Clay Ceramics NESHAP - Years 1 to 3

Year	Technical hours	Management hours	Clerical Hours	Total hours	Labor costs
Year 1	6.0	0.3	0.6	6.9	\$358
Year 2	0	0	0	0	\$0
Year 3	6.0	0.3	0.6	6.9	\$358
Totals	12	0.6	1.2	14	\$716
Average				4.6	\$239

Attachment 1

Annual Burden and Cost – Years 4 to 6

Table 1-1. Annual Respondent Burden and Cost of Reporting and Recordkeeping Requirements of the Clay Ceramics NESHAP - Year 4

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person-hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person-hours per year (E×0.1)	(H) Cost,\$ ^b
1. Applications	N/A							
2. Survey and Studies	N/A							
3. Reporting Requirements								
A. Read and understand rule requirements	2	1	2	0	0	0	0	\$0
B. Required activities								
Develop OM&M plan ^{c,d}	100	1	100	0	0	0	0	\$0
Conduct APCD maintenance/inspections	20	1	20	3	60	3.0	6.0	\$3,647
Conduct shuttle kiln maintenance/inspections	20	1	20	3	60	3.0	6.0	\$3,647
C. Create information	See 3B							
D. Gather existing information	See 3B							
E. Write report								
Initial notification of applicability ^d	2	1	2	0	0	0	0	\$0
Notification of constr./reconstr. ^d	2	1	2	0	0	0	0	\$0
Notification of anticipated startup ^d	2	1	2	0	0	0	0	\$0
Notification of actual startup ^d	2	1	2	0	0	0	0	\$0
Request APCD maintenance exemption ^d	2	1	2	0	0	0	0	\$0
Notification of performance test	2	1	2	3	6.0	0.3	0.6	\$365
Notification of compliance status ^e	16	1	16	3	48	2.4	4.8	\$2,918
Report of performance test (through ERT)	4	1	4	3	12	0.6	1.2	\$729
Notification of alternative fuel use ^f	2	1	2	3	6.0	0.3	0.6	\$365
First compliance report	16	1	16	3	48	2.4	4.8	\$2,918
Semi-annual compliance reports								
Deviations ^g	20	2	40	0	0	0	0	\$0

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person-hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person-hours per year (E×0.1)	(H) Cost,\$ ^b
No deviations ^g	8	2	16	0	0	0	0	\$0
Report of alternative fuel use ^f	4	2	8	0.3	2.4	0.1	0.2	\$146
4. Recordkeeping Requirements								
A. Read instructions	See 3A							
B. Plan activities								
Prepare for initial performance test ^c	24	1	24	3	72	3.6	7.2	\$4,377
Prepare for repeat performance test ^c	24	1	24	0.3	7.2	0.4	0.7	\$438
C. Implement activities								
Attend initial performance test ^{c,h}	24	2.5	60	3	180	9.0	18	\$10,942
Attend repeat performance test ^{c,h}	24	2.5	60	0.3	18	0.9	1.8	\$1,094
D. Develop record system	40	6	240	0	0	0	0	\$0
E. Time to enter information								
Records of compliance data ^c	6	52	312	3	936	47	94	\$56,899
Records of alternative fuel use	1	12	12	3	36	1.8	3.6	\$2,188
Records of APCD maintenance/inspections	See 3B							
Records of compliance with work practices	See 3B							
Records of malfunctions	2	12	24	3	72	3.6	7.2	\$4,377
F. Time to train personnel ^{c,i}	40	6	240	0	0	0	0	\$0
G. Time to transmit/disclose information ^j	0.25	1	0.25	3	0.8	0.04	0.08	\$46
TOTAL ANNUAL BURDEN AND COST (SALARY)					1,564	78	156	\$95,096
TOTAL ANNUAL NUMBER OF RESPONSES^k				16				

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person-hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person-hours per year (E×0.1)	(H) Cost,\$ ^b
CAPITAL COSTS:								
Initial performance tests ¹								\$102,000
Repeat performance tests ^m								\$10,200
Total capital cost								\$112,200
ANNUALIZED CAPITAL COSTS:ⁿ								
Initial performance tests								\$24,880
Repeat performance tests								\$2,488
Total annualized capital cost								\$27,368
ANNUAL O&M COSTS^o								
Photocopy/postage								\$343
Visible emissions tests								\$20,890
Total O&M cost								\$21,233
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								\$27,711

^a A total of three existing major sources (all sanitaryware) are expected to comply during the 3-year ICR clearance period. No new kilns are anticipated to be constructed in the near future, and existing capacity is assumed sufficient to cover any short-term increases in production.

^b Costs are based on the following hourly rates: technical at \$53.17, management at \$88.56 and clerical at \$31.90. Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.

^c Person-hours per occurrence and number of occurrences per year were derived based on comments from BIA.

^d One-time only activities.

^e The notification of compliance status includes the performance test report. The cost burden associated with developing the performance test report is included in the performance test capital cost at the bottom of the table.

^f Assumes 10% of facilities will use an alternative fuel once per year.

^g Assumes 15% of respondents have deviations to report in semiannual compliance reports and 85% report no deviations.

^h Assumes 10% of plants fail initial performance test and must repeat it. Based on comments from BIA, an average of 2.5 plant personnel attend performance tests. Assume no travel for plant personnel. Assume testing takes 2, 12-hour days per plant. Repeat testing is also required 5 years following initial testing.

ⁱ Based on comments from BIA, assumes 40 hours of training for 6 plant personnel.

^j Time associated with transmitting reports. Equal to the number of respondents submitting reports.

^k The total annual number of responses is calculated by summing the product of columns B and D for each of the reports listed in 3E.

^l Assumes EPA Method 5 for PM, EPA Method 29 for metals, EPA Method 26A for HF and HCl and EPA Method 23 for dioxins/furans.

^m Assumes 10% of plants will fail an initial performance test and must repeat it.

ⁿ Annualized costs are calculated by multiplying the capital recovery factor (CRF) by the capital cost. $CRF = i * (1+i)^t / ((1+i)^t - 1)$ where i = interest rate (%) and t = equipment life (years). Performance testing costs annualized assuming a 5 year life and 7 percent interest.

^o O&M costs for photocopying and postage estimated as \$22/report. The monitoring equipment needed to monitor parameters other than visible emissions (e.g., limestone or lime feed rate) is included as part of the control system and therefore adds no additional capital or O&M cost. The O&M cost associated with VE monitoring includes VE training for two people every 5 years, conducting the 15-minute VE test and preparing for/documenting the VE test (occurs after 3-year ICR clearance period).

N/A = Not Applicable.

Table 1-2. Annual Respondent Burden and Cost of Reporting and Recordkeeping Requirements of the Clay Ceramics NESHAP - Year 5

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person-hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person-hours per year (E×0.1)	(H) Cost,\$ ^b
1. Applications	N/A							
2. Survey and Studies	N/A							
3. Reporting Requirements								
A. Read and understand rule requirements	2	1	2	0	0	0	0	\$0
B. Required activities								
Develop OM&M plan ^{c,d}	100	1	100	0	0	0	0	\$0
Conduct APCD maintenance/inspections	20	1	20	0	0	0	0	\$0
Conduct shuttle kiln maintenance/inspections	20	1	20	0	0	0	0	\$0
C. Create information	See 3B							
D. Gather existing information	See 3B							
E. Write report								
Initial notification of applicability ^d	2	1	2	0	0	0	0	\$0
Notification of constr./reconstr. ^d	2	1	2	0	0	0	0	\$0
Notification of anticipated startup ^d	2	1	2	0	0	0	0	\$0
Notification of actual startup ^d	2	1	2	0	0	0	0	\$0
Request APCD maintenance exemption ^d	2	1	2	0	0	0	0	\$0
Notification of performance test	2	1	2	0	0	0	0	\$0
Notification of compliance status ^e	16	1	16	0	0	0	0	\$0
Report of performance test (through ERT)	4	1	4	0	0	0	0	\$0
Notification of alternative fuel use ^f	2	1	2	0	0	0	0	\$0
First compliance report	16	1	16	0	0	0	0	\$0
Semi-annual compliance reports								
Deviations ^g	20	2	40	0.5	18	0.9	1.8	\$1,094

Burden item	(A) Person- hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person- hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person- hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person- hours per year (E×0.1)	(H) Cost,\$ ^b
No deviations ^g	8	2	16	2.6	41	2.0	4.1	\$2,480
Report of alternative fuel use ^f	4	2	8	0.3	2.4	0.1	0.2	\$146
4. Recordkeeping Requirements								
A. Read instructions	See 3A							
B. Plan activities								
Prepare for initial performance test ^c	24	1	24	0	0	0	0	\$0
Prepare for repeat performance test ^c	24	1	24	0	0	0	0	\$0
C. Implement activities								
Attend initial performance test ^{c,h}	24	2.5	60	0	0	0	0	\$0
Attend repeat performance test ^{c,h}	24	2.5	60	0	0	0	0	\$0
D. Develop record system	40	6	240	0	0	0	0	\$0
E. Time to enter information								
Records of compliance data ^c	6	52	312	3	936	47	94	\$56,899
Records of alternative fuel use	1	12	12	3	36	1.8	3.6	\$2,188
Records of APCD maintenance/inspections	See 3B							
Records of compliance with work practices	See 3B							
Records of malfunctions	2	12	24	3	72	3.6	7.2	\$4,377
F. Time to train personnel ^{c,i}	40	6	240	0	0	0	0	\$0
G. Time to transmit/disclose information ^j	0.25	1	0.25	3	0.8	0.04	0.08	\$46
TOTAL ANNUAL BURDEN AND COST (SALARY)					1,106	55	111	\$67,230
TOTAL ANNUAL NUMBER OF RESPONSES ^k				7				

Burden item	(A) Person- hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person- hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person- hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person- hours per year (E×0.1)	(H) Cost,\$ ^b
CAPITAL COSTS:								
Initial performance tests ¹								\$102,000
Repeat performance tests ^m								\$10,200
Total capital cost								\$112,200
ANNUALIZED CAPITAL COSTS: ⁿ								
Initial performance tests								\$24,880
Repeat performance tests								\$2,488
Total annualized capital cost								\$27,368
ANNUAL O&M COSTS ^o								
Photocopy/postage								\$145
Visible emissions tests								\$20,890
Total O&M cost								\$21,035
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								\$27,513

^a A total of three existing major sources (all sanitaryware) are expected to comply during the 3-year ICR clearance period. No new kilns are anticipated to be constructed in the near future, and existing capacity is assumed sufficient to cover any short-term increases in production.

^b Costs are based on the following hourly rates: technical at \$53.17, management at \$88.56 and clerical at \$31.90. Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.

^c Person-hours per occurrence and number of occurrences per year were derived based on comments from BIA.

^d One-time only activities.

^e The notification of compliance status includes the performance test report. The cost burden associated with developing the performance test report is included in the performance test capital cost at the bottom of the table.

^f Assumes 10% of facilities will use an alternative fuel once per year.

^g Assumes 15% of respondents have deviations to report in semiannual compliance reports and 85% report no deviations.

^h Assumes 10% of plants fail initial performance test and must repeat it. Based on comments from BIA, an average of 2.5 plant personnel attend performance tests. Assume no travel for plant personnel. Assume testing takes 2, 12-hour days per plant. Repeat testing is also required 5 years following initial testing.

ⁱ Based on comments from BIA, assumes 40 hours of training for 6 plant personnel.

^j Time associated with transmitting reports. Equal to the number of respondents submitting reports.

^k The total annual number of responses is calculated by summing the product of columns B and D for each of the reports listed in 3E.

^l Assumes EPA Method 5 for PM, EPA Method 29 for metals, EPA Method 26A for HF and HCl and EPA Method 23 for dioxins/furans.

^m Assumes 10% of plants will fail an initial performance test and must repeat it.

ⁿ Annualized costs are calculated by multiplying the capital recovery factor (CRF) by the capital cost. $CRF = i * (1+i)^t / ((1+i)^t - 1)$ where i = interest rate (%) and t = equipment life (years). Performance testing costs annualized assuming a 5 year life and 7 percent interest.

^o O&M costs for photocopying and postage estimated as \$22/report. The monitoring equipment needed to monitor parameters other than visible emissions (e.g., limestone or lime feed rate) is included as part of the control system and therefore adds no additional capital or O&M cost. The O&M cost associated with VE monitoring includes VE training for two people every 5 years, conducting the 15-minute VE test and preparing for/documenting the VE test (occurs after 3-year ICR clearance period).

N/A = Not Applicable.

Table 1-3. Annual Respondent Burden and Cost of Reporting and Recordkeeping Requirements of the Clay Ceramics NESHAP - Year 6

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person-hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person-hours per year (E×0.1)	(H) Cost,\$ ^b
1. Applications	N/A							
2. Survey and Studies	N/A							
3. Reporting Requirements								
A. Read and understand rule requirements	2	1	2	0	0	0	0	\$0
B. Required activities								
Develop OM&M plan ^{c,d}	100	1	100	0	0	0	0	\$0
Conduct APCD maintenance/inspections	20	1	20	0	0	0	0	\$0
Conduct shuttle kiln maintenance/inspections	20	1	20	0	0	0	0	\$0
C. Create information	See 3B							
D. Gather existing information	See 3B							
E. Write report								
Initial notification of applicability ^d	2	1	2	0	0	0	0	\$0
Notification of constr./reconstr. ^d	2	1	2	0	0	0	0	\$0
Notification of anticipated startup ^d	2	1	2	0	0	0	0	\$0
Notification of actual startup ^d	2	1	2	0	0	0	0	\$0
Request APCD maintenance exemption ^d	2	1	2	0	0	0	0	\$0
Notification of performance test	2	1	2	0	0	0	0	\$0
Notification of compliance status ^e	16	1	16	0	0	0	0	\$0
Report of performance test (through ERT)	4	1	4	0	0	0	0	\$0
Notification of alternative fuel use ^f	2	1	2	0	0	0	0	\$0
First compliance report	16	1	16	0	0	0	0	\$0
Semi-annual compliance reports								
Deviations ^g	20	2	40	0.5	18	0.9	1.8	\$1,094

Burden item	(A) Person- hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person- hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person- hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person- hours per year (E×0.1)	(H) Cost,\$ ^b
No deviations ^g	8	2	16	2.6	41	2.0	4.1	\$2,480
Report of alternative fuel use ^f	4	2	8	0.3	2.4	0.1	0.2	\$146
4. Recordkeeping Requirements								
A. Read instructions	See 3A							
B. Plan activities								
Prepare for initial performance test ^c	24	1	24	0	0	0	0	\$0
Prepare for repeat performance test ^c	24	1	24	0	0	0	0	\$0
C. Implement activities								
Attend initial performance test ^{c,h}	24	2.5	60	0	0	0	0	\$0
Attend repeat performance test ^{c,h}	24	2.5	60	0	0	0	0	\$0
D. Develop record system	40	6	240	0	0	0	0	\$0
E. Time to enter information								
Records of compliance data ^c	6	52	312	3	936	47	94	\$56,899
Records of alternative fuel use	1	12	12	3	36	1.8	3.6	\$2,188
Records of APCD maintenance/inspections	See 3B							
Records of compliance with work practices	See 3B							
Records of malfunctions	2	12	24	3	72	3.6	7.2	\$4,377
F. Time to train personnel ^{c,i}	40	6	240	0	0	0	0	\$0
G. Time to transmit/disclose information ^j	0.25	1	0.25	3	0.8	0.04	0.08	\$46
TOTAL ANNUAL BURDEN AND COST (SALARY)					1,106	55	111	\$67,230
TOTAL ANNUAL NUMBER OF RESPONSES ^k				7				

Burden item	(A) Person-hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person-hours per respondent per year (C=A×B)	(D) Respondents per year ^a	(E) Technical person-hours per year (E=C×D)	(F) Management person-hours per year (E×0.05)	(G) Clerical person-hours per year (E×0.1)	(H) Cost,\$ ^b
CAPITAL COSTS:								
Initial performance tests ¹								\$102,000
Repeat performance tests ^m								\$10,200
Total capital cost								\$112,200
ANNUALIZED CAPITAL COSTS:ⁿ								
Initial performance tests								\$24,880
Repeat performance tests								\$2,488
Total annualized capital cost								\$27,368
ANNUAL O&M COSTS^o								
Photocopy/postage								\$145
Visible emissions tests								\$20,890
Total O&M cost								\$21,035
TOTAL ANNUALIZED COSTS (Annualized capital + O&M costs)								\$27,513

^a A total of three existing major sources (all sanitaryware) are expected to comply during the 3-year ICR clearance period. No new kilns are anticipated to be constructed in the near future, and existing capacity is assumed sufficient to cover any short-term increases in production.

^b Costs are based on the following hourly rates: technical at \$53.17, management at \$88.56 and clerical at \$31.90. Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.

^c Person-hours per occurrence and number of occurrences per year were derived based on comments from BIA.

^d One-time only activities.

^e The notification of compliance status includes the performance test report. The cost burden associated with developing the performance test report is included in the performance test capital cost at the bottom of the table.

^f Assumes 10% of facilities will use an alternative fuel once per year.

^g Assumes 15% of respondents have deviations to report in semiannual compliance reports and 85% report no deviations.

^h Assumes 10% of plants fail initial performance test and must repeat it. Based on comments from BIA, an average of 2.5 plant personnel attend performance tests. Assume no travel for plant personnel. Assume testing takes 2, 12-hour days per plant. Repeat testing is also required 5 years following initial testing.

ⁱ Based on comments from BIA, assumes 40 hours of training for 6 plant personnel.

^j Time associated with transmitting reports. Equal to the number of respondents submitting reports.

^k The total annual number of responses is calculated by summing the product of columns B and D for each of the reports listed in 3E.

^l Assumes EPA Method 5 for PM, EPA Method 29 for metals, EPA Method 26A for HF and HCl and EPA Method 23 for dioxins/furans.

^m Assumes 10% of plants will fail an initial performance test and must repeat it.

ⁿ Annualized costs are calculated by multiplying the capital recovery factor (CRF) by the capital cost. $CRF = i * (1+i)^t / ((1+i)^t - 1)$ where i = interest rate (%) and t = equipment life (years). Performance testing costs annualized assuming a 5 year life and 7 percent interest.

^o O&M costs for photocopying and postage estimated as \$22/report. The monitoring equipment needed to monitor parameters other than visible emissions (e.g., limestone or lime feed rate) is included as part of the control system and therefore adds no additional capital or O&M cost. The O&M cost associated with VE monitoring includes VE training for two people every 5 years, conducting the 15-minute VE test and preparing for/documenting the VE test (occurs after 3-year ICR clearance period).

N/A = Not Applicable.

Table 1-4. Summary of Respondent Burden and Cost of the Clay Ceramics NESHAP - Years 4 to 6

Year	No. responses	Technical hours	Management hours	Clerical Hours	Total hours	Labor costs	Non-Labor Costs			
							Capital	Annualized capital	Annual O&M	Total annualized cost
Year 4	16	1,564	78	156	1,799	\$95,096	\$112,200	\$27,368	\$21,233	\$48,601
Year 5	7	1,106	55	111	1,272	\$67,230	\$112,200	\$27,368	\$21,035	\$48,403
Year 6	7	1,106	55	111	1,272	\$67,230	\$112,200	\$27,368	\$21,035	\$48,403
Totals	29	3,776	189	378	4,343	\$229,557	\$336,600	\$82,104	\$63,304	\$145,408
Average	10				1,448	\$76,519	\$112,200	\$27,368	\$21,101	\$48,469

Table 1-5. Annual Burden and Cost to the Federal Government of the Clay Ceramics NESHAP - Year 4

Activity	(A) EPA person- hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person- hours per plant per year (C=AxB)	(D) Plants per year ^a	(E) Technical person- hours per year (E=CxD)	(F) Management person-hours per year (E×0.05)	(G) Clerical person- hours per year (E×0.1)	(H) Cost,\$ ^b
1. Attend initial performance test ^c	24	1	24	0.3	7.2	0.4	0.7	\$429
2. Attend repeat performance test ^{c,d}								
Retesting preparation	8	1	8	0.03	0.2	0.01	0.02	\$14
Retesting	24	1	24	0.03	0.7	0.04	0.07	\$43
3. Litigation ^e	2,080	1	2,080	0.03	62	3.1	6.2	\$3,722
4. Excess emissions enforcement activities ^f	48	1	48	0.2	7.2	0.4	0.7	\$429
5. Report review								
Initial notification of applicability	2	1	2	0	0	0	0	\$0
Notification of constr./reconstr.	2	1	2	0	0	0	0	\$0
Notification of anticipated startup	2	1	2	0	0	0	0	\$0
Notification of actual startup	2	1	2	0	0	0	0	\$0
Request for APCD maintenance exemption	2	1	2	0	0	0	0	\$0
Notification of performance test	2	1	2	3	6.0	0.3	0.6	\$358
Notification of compliance status ^g	60	1	60	3	180	9.0	18	\$10,737
Notification of alternative fuel use	2	1	2	3	6.0	0.3	0.6	\$358
Repeat performance test report ^d	40	1	40	0.3	12	0.6	1.2	\$716
First compliance report	4	1	4	3	12	0.6	1.2	\$716
Semi-annual compliance reports:								
Deviations ^h	8	2	16	0	0	0	0	\$0
No deviations ^h	2	2	4	0	0	0	0	\$0
Report of alternative fuel use ⁱ	1	1	1	0.3	0.3	0.02	0.03	\$18
TOTAL BURDEN AND COST (SALARY)					294	15	29	\$17,540
Travel Expenses for Tests Attended ^j								\$240
TOTAL ANNUAL COST (SALARY + EXPENSES)								\$17,780

- ^a A total of three existing major sources (all sanitaryware) are expected to comply during the 3-year ICR clearance period. No new kilns are anticipated to be constructed in the near future, and existing capacity is assumed sufficient to cover any short-term increases in production.
- ^b Costs are based on the following hourly rates: technical at \$52.37, management at \$86.56 and clerical at \$29.52. Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.
- ^c Assumes Agency personnel will attend performance tests at 10% of plants.
- ^d Assumes 10% of plants will fail an initial performance test and must repeat it and assumes Agency personnel attend 10% of the repeat tests.
- ^e Assumes 1% of plants will be involved in litigation.
- ^f Assumes 5% of the plants are required to retest as a result of excess emissions and assumes Agency personnel attend all of the retests.
- ^g Notification of compliance status includes the performance test report.
- ^h Assumes 15% of the plants report deviations semiannually and 85% report no deviations.
- ⁱ Assumes 10% of facilities will use an alternative fuel once per year.
- ^j Assumes Agency personnel (1 person) will spend 2 days per plant plus time for travel, at \$50 per diem per day, and \$400 transportation expense per round trip to attend performance tests.
- N/A = Not applicable.

Table 1-6. Annual Burden and Cost to the Federal Government of the BSCP NESHAP - Year 5

Activity	(A) EPA person- hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person- hours per plant per year (C=AxB)	(D) Plants per year ^a	(E) Technical person- hours per year (E=CxD)	(F) Management person-hours per year (E×0.05)	(G) Clerical person- hours per year (E×0.1)	(H) Cost,\$ ^b
1. Attend initial performance test ^c	24	1	24	0	0	0	0	\$0
2. Attend repeat performance test ^{c,d}								
Retesting preparation	8	1	8	0	0	0	0	\$0
Retesting	24	1	24	0	0	0	0	\$0
3. Litigation ^e	2,080	1	2,080	0.03	62	3.1	6.2	\$3,722
4. Excess emissions enforcement activities ^f	48	1	48	0.2	7.2	0.4	0.7	\$429
5. Report review								
Initial notification of applicability	2	1	2	0	0	0	0	\$0
Notification of constr./reconstr.	2	1	2	0	0	0	0	\$0
Notification of anticipated startup	2	1	2	0	0	0	0	\$0
Notification of actual startup	2	1	2	0	0	0	0	\$0
Request for APCD maintenance exemption	2	1	2	0	0	0	0	\$0
Notification of performance test	2	1	2	0	0	0	0	\$0
Notification of compliance status ^g	60	1	60	0	0	0	0	\$0
Notification of alternative fuel use	2	1	2	0	0	0	0	\$0
Repeat performance test report ^d	40	1	40	0	0	0	0	\$0
First compliance report	4	1	4	0	0	0	0	\$0
Semi-annual compliance reports:								
Deviations ^h	8	2	16	0.5	7.2	0.4	0.7	\$429
No deviations ^h	2	2	4	2.6	10	0.5	1.0	\$608
Report of alternative fuel use ⁱ	1	1	1	0.3	0.3	0.02	0.03	\$18
TOTAL BURDEN AND COST (SALARY)					87	4.4	8.7	\$5,207
Travel Expenses for Tests Attended ^j								\$75
TOTAL ANNUAL COST (SALARY + EXPENSES)								\$5,282

- ^a A total of three existing major sources (all sanitaryware) are expected to comply during the 3-year ICR clearance period. No new kilns are anticipated to be constructed in the near future, and existing capacity is assumed sufficient to cover any short-term increases in production.
- ^b Costs are based on the following hourly rates: technical at \$52.37, management at \$86.56 and clerical at \$29.52. Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.
- ^c Assumes Agency personnel will attend performance tests at 10% of plants.
- ^d Assumes 10% of plants will fail an initial performance test and must repeat it and assumes Agency personnel attend 10% of the repeat tests.
- ^e Assumes 1% of plants will be involved in litigation.
- ^f Assumes 5% of the plants are required to retest as a result of excess emissions and assumes Agency personnel attend all of the retests.
- ^g Notification of compliance status includes the performance test report.
- ^h Assumes 15% of the plants report deviations semiannually and 85% report no deviations.
- ⁱ Assumes 10% of facilities will use an alternative fuel once per year.
- ^j Assumes Agency personnel (1 person) will spend 2 days per plant plus time for travel, at \$50 per diem per day, and \$400 transportation expense per round trip to attend performance tests.
- N/A = Not applicable.

Table 1-7. Annual Burden and Cost to the Federal Government of the BSCP NESHAP - Year 6

Activity	(A) EPA person- hours per occurrence	(B) No. of occurrences per plant per year	(C) EPA person- hours per plant per year (C=AxB)	(D) Plants per year ^a	(E) Technical person- hours per year (E=CxD)	(F) Management person-hours per year (E×0.05)	(G) Clerical person- hours per year (E×0.1)	(H) Cost,\$ ^b
1. Attend initial performance test ^c	24	1	24	0	0	0	0	\$0
2. Attend repeat performance test ^{c,d}								
Retesting preparation	8	1	8	0	0	0	0	\$0
Retesting	24	1	24	0	0	0	0	\$0
3. Litigation ^e	2,080	1	2,080	0.03	62	3.1	6.2	\$3,722
4. Excess emissions enforcement activities ^f	48	1	48	0.2	7.2	0.4	0.7	\$429
5. Report review								
Initial notification of applicability	2	1	2	0	0	0	0	\$0
Notification of constr./reconstr.	2	1	2	0	0	0	0	\$0
Notification of anticipated startup	2	1	2	0	0	0	0	\$0
Notification of actual startup	2	1	2	0	0	0	0	\$0
Request for APCD maintenance exemption	2	1	2	0	0	0	0	\$0
Notification of performance test	2	1	2	0	0	0	0	\$0
Notification of compliance status ^g	60	1	60	0	0	0	0	\$0
Notification of alternative fuel use	2	1	2	0	0	0	0	\$0
Repeat performance test report ^d	40	1	40	0	0	0	0	\$0
First compliance report	4	1	4	0	0	0	0	\$0
Semi-annual compliance reports:								
Deviations ^h	8	2	16	0.5	7.2	0.4	0.7	\$429
No deviations ^h	2	2	4	2.6	10	0.5	1.0	\$608
Report of alternative fuel use ⁱ	1	1	1	0.3	0.3	0.02	0.03	\$18
TOTAL BURDEN AND COST (SALARY)					87	4.4	8.7	\$5,207
Travel Expenses for Tests Attended ^j								\$75
TOTAL ANNUAL COST (SALARY + EXPENSES)								\$5,282

- ^a A total of three existing major sources (all sanitaryware) are expected to comply during the 3-year ICR clearance period. No new kilns are anticipated to be constructed in the near future, and existing capacity is assumed sufficient to cover any short-term increases in production.
- ^b Costs are based on the following hourly rates: technical at \$52.37, management at \$86.56 and clerical at \$29.52. Management person-hours and clerical person-hours are assumed to be 5 percent and 10 percent of technical person-hours, respectively.
- ^c Assumes Agency personnel will attend performance tests at 10% of plants.
- ^d Assumes 10% of plants will fail an initial performance test and must repeat it and assumes Agency personnel attend 10% of the repeat tests.
- ^e Assumes 1% of plants will be involved in litigation.
- ^f Assumes 5% of the plants are required to retest as a result of excess emissions and assumes Agency personnel attend all of the retests.
- ^g Notification of compliance status includes the performance test report.
- ^h Assumes 15% of the plants report deviations semiannually and 85% report no deviations.
- ⁱ Assumes 10% of facilities will use an alternative fuel once per year.
- ^j Assumes Agency personnel (1 person) will spend 2 days per plant plus time for travel, at \$50 per diem per day, and \$400 transportation expense per round trip to attend performance tests.
- N/A = Not applicable.

Table 1-8. Summary of Burden and Cost to the Federal Government of the Clay Ceramics NESHAP - Years 4 to 6

Year	Technical hours	Management hours	Clerical Hours	Total hours	Labor costs
Year 4	294	15	29	338	\$17,780
Year 5	87	4.4	8.7	100	\$5,282
Year 6	87	4.4	8.7	100	\$5,282
Totals	469	23	47	539	\$28,345
Average				180	\$9,448