## SUPPORTING STATEMENT ENVIRONMENTAL PROTECTION AGENCY

NSPS for Calciners and Dryers in Mineral Industries (40 CFR Part 60, Subpart UUU) (Renewal)

#### 1. Identification of the Information Collection

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

NSPS for Calciners and Dryers in Mineral Industries (40 CFR Part 60, Subpart UUU) (Renewal), EPA ICR Number 0746.10, OMB Control Number 2060-0251.

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

The New Source Performance Standards (NSPS) for Calciners and Dryers in Mineral Industries (40 CFR Part 60, Subpart UUU) were proposed on April 23, 1986, and promulgated on September 28, 1992. These regulations apply only to new calciners and dryers at mineral processing plants that either process or produce either any of the following minerals and their concentrates or any mixture of which the majority is any of the following minerals or a combination of these minerals: alumina, ball clay, bentonite, diatomite, feldspar, fire clay, fuller's earth, gypsum, industrial sand, kaolin, lightweight aggregate, magnesium compounds, perlite, roofing granules, talc, titanium dioxide, and vermiculite. Particulate matter (PM) is the pollutant regulated under this subpart. Feed and product conveyors are not considered part of the affected facility. Facilities subject to NSPS Subpart LL, Metallic Mineral Processing Plants are not subject to these standards. There are additional processes and process units at mineral processing plants listed at Section 60.730(b) which are not subject to the provisions of this Subpart. New facilities include those that commenced construction, modification or reconstruction after the date of proposal. This information is being collected to assure compliance with 40 CFR Part 60, Subpart UUU.

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

Any owner/operator subject to the provisions of this part shall maintain a file containing these documents, and retain the file for at least two years following the generation date of such maintenance reports and records. All reports are sent to the delegated state or local authority. In the event that there is no such delegated authority, the reports are sent directly to the U.S. Environmental Protection Agency (EPA) regional office.

There are approximately 167 calciners and dryers in mineral facilities, which are owned and operated by the calciners and dryers industry (aka: the "Affected Public"). None of the facilities in the United States are owned by either state, local, tribal, or the Federal government;

all are privately-owned, for-profit commercial businesses. The "burden" to the Affected Public may be found below in Table 1: Annual Respondent Burden and Cost – NSPS for Calciners and Dryers in Mineral Industries (40 CFR Part 60, Subpart UUU) (Renewal). The Federal Government's "burden" is attributed entirely to work performed by either Federal employees or government contractors and may be found below in Table 2: Average Annual EPA Burden and Cost – NSPS for Calciners and Dryers in Mineral Industries (40 CFR Part 60, Subpart UUU) (Renewal). We assume that they will all respond to EPA inquiries.

Based on our consultations with industry representatives, there is an average of one affected facility at each plant site and that each plant site has only one respondent (i.e., the owner/operator of the plant site).

Over the next three years, an average of 167 respondents per year will be subject to these standards, and no additional respondents per year will become subject to these same standards.

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

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

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

The EPA is charged under Section 111 of the Clean Air Act (CAA), as amended, to establish standards of performance for new stationary sources that reflect:

... application of the best technological system of continuous emissions reduction which (taking into consideration the cost of achieving such emissions reduction, or any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated. Section 111(a)(l).

The Agency refers to this charge as selecting the best demonstrated technology (BDT). Section 111 also requires that the Administrator review and, if appropriate, revise such standards every eight years.

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

(A) Establish and maintain such records; (B) make such reports; (C) install, use, and maintain such monitoring equipment, and use such audit procedures, or methods; (D) sample such emissions (in accordance with such procedures or methods, at such locations,

at such intervals, during such periods, and in such manner as the Administrator shall prescribe); (E) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; (F) submit compliance certifications in accordance with Section 114(a)(3); and (G) provide such other information as the Administrator may reasonably require.

In the Administrator's judgment, PM emissions from calciners and dryers in the mineral industries either cause or contribute to air pollution that may reasonably be anticipated to endanger public health and/or welfare. Therefore, the NSPS were promulgated for this source category at 40 CFR Part 60, Subpart UUU.

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

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

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

The notifications required in the standard are used to inform either the Agency or its delegated authority when a source becomes subject to the requirements of the regulations. The reviewing authority may then inspect the source to check if the pollution control devices are properly installed and operated and the standard are being met. The performance test may also be observed.

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

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

The requested recordkeeping and reporting are required under 40 CFR Part 60, Subpart UUU.

#### 3(a) Non-duplication

If the subject standards have not been delegated, the information is sent directly to the appropriate EPA regional office. Otherwise, the information is sent directly to the delegated state or local agency. If a state or local agency has adopted its own similar standards to implement the

Federal standards, a copy of the report submitted to the state or local agency can be sent to the Administrator in lieu of the report required by the Federal standards. Therefore, duplication does not exists.

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

An announcement of a public comment period for the renewal of this ICR was published in the <u>Federal Register</u> (82 <u>FR</u> 29552) on June 29, 2017. No comments were received on the burden published in the <u>Federal Register</u>.

#### **3(c) Consultations**

The Agency has consulted industry experts and internal data sources to project the number of affected facilities and industry growth over the next three years. The primary source of information as reported by industry, in compliance with the recordkeeping and reporting provisions in the standard, is the Integrated Compliance Information System (ICIS). ICIS is EPA's database for the collection, maintenance, and retrieval of compliance data for industrial and government-owned facilities. The growth rate for the industry is based on our consultations with the Agency's internal industry experts. Approximately 167 respondents will be subject to these standard over the three-year period covered by this ICR.

Industry trade associations and other interested parties were provided an opportunity to comment on the burden associated with these standards as they were being developed and these same standard have been reviewed previously to determine the minimum information needed for compliance purposes. In developing this ICR, we contacted both: 1) the National Stone, Sand, and Gravel Association (NSSGA), at (703) 525-8788; and 2) Van Horn, Metz & Co. Inc., at (610) 828-4500.

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

#### 3(d) Effects of Less-Frequent Collection

Less-frequent information collection would decrease the margin of assurance that facilities are continuing to meet these standards. Requirements for information gathering and recordkeeping are useful techniques to ensure that good operation and maintenance practices are applied and emission limitations are met. If the information required by these standards was collected less-frequently, the proper operation and maintenance of control equipment and the possibility of detecting violations would be less likely.

## **3(e) General Guidelines**

These reporting or recordkeeping requirements do not violate any of the regulations

promulgated by OMB under 5 CFR Part 1320, Section 1320.5.

#### **3(f) Confidentiality**

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

## **3(g) Sensitive Questions**

The reporting or recordkeeping requirements in these standards do not include sensitive questions.

## 4. The Respondents and the Information Requested

## 4(a) Respondents/SIC Codes

The respondents to the recordkeeping and reporting requirements are mineral processing plants with calciners and dryers. The United States Standard Industrial Classification (SIC) codes and the corresponding North American Industry Classification System (NAICS) codes for the respondents affected by these standards are given in the table below:

Standard (40 CFR Part 60, Subpart UUU)	SIC Codes	NAICS Codes
Industrial Sand Mining	1446	212322
Kaolin and Ball Clay Mining	1455	212324
Other Crushed and Broken Stone Mining and Quarrying	1499	212319
All Other Nonmetallic Mineral Mining	1499	212399
Inorganic dye and Pigment Manufacturing	2816	325131
Ground or Treated Mineral and Earth Manufacturing	3295	327992
Other chemical and Fertilizer Mineral Mining	3295	327992
Clay and Ceramic and Refractory Minerals Mining	3295	212325
Kaolin and Ball Clay Mining	3295	212324
All Other Nonmetallic Mineral Mining	3295	212399

## 4(b) Information Requested

#### (i) Data Items

In this ICR, all the data that is recorded or reported is required by the NSPS for Calciners and Dryers in Mineral Industries (40 CFR Part 60, Subpart UUU).

A source must make the following reports:

Notifications						
Notification of construction/reconstruction	60.7(a)(1)					
Notification of actual startup	60.7(a)(3)					
Notification of physical or operational change	60.7(a)(4)					
Initial performance test results	60.8(a)					
Notification of initial performance test and repeat of test	60.8(d)					
Demonstration of continuous monitoring system (CMS)	60.7(a)(5)					

Reports	
Semiannual reports	60.7(c), 60.735(c)

# A source must keep the following records:

Recordkeeping						
Maintain records of startup, shutdown, malfunction period where the continuous monitoring system is inoperative	60.7(b)					
Record opacity using continuous opacity monitors (COM)	60.734(a)					
Observe and record Method 9 opacities	60.734(b)					
Install, calibrate, maintain, and operate a device that continuously measures and records the pressure loss of the gas stream through the scrubber	60.734(d)					
Daily recording of the two-hours average of the change in the pressure of the gas stream across the scrubber and flow rates of the scrubbing liquid	60.735(b)					

# **Electronic Reporting**

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

a plant site.

#### (ii) Respondent Activities

#### **Respondent Activities**

Familiarization with the regulatory requirements.

Install, calibrate, maintain, and operate CMS for opacity, or for pressure drop and liquid supply pressure for wet scrubber.

Perform initial performance test, Reference Method 9 test, and repeat performance tests if necessary.

Write the notifications and reports listed above.

Enter information required to be recorded above.

Submit the required reports developing, acquiring, installing, and utilizing technology and systems for the purpose of collecting, validating, and verifying information.

Develop, acquire, install, and utilize technology and systems for the purpose of processing and maintaining information.

Develop, acquire, install, and utilize technology and systems for the purpose of disclosing and providing information.

Train personnel to be able to respond to a collection of information.

Transmit, or otherwise disclose the information.

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

## 5(a) Agency Activities

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

#### **Agency Activities**

Observe initial performance tests and repeat performance tests if necessary.

Review notifications and reports, including performance test reports, and excess emissions reports, required to be submitted by industry.

## **Agency Activities**

Audit facility records.

Input, analyze, and maintain data in the Enforcement and Compliance History Online (ECHO) and ICIS.

## 5(b) Collection Methodology and Management

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

Information contained in the reports is reported by state and local governments in the ICIS Air database, which is operated and maintained by EPA's Office of Compliance. ICIS is EPA's database for the collection, maintenance, and retrieval of compliance data for industrial and government-owned facilities. EPA uses ICIS for tracking air pollution compliance and enforcement by local and state regulatory agencies, EPA regional offices and EPA headquarters. EPA and its delegated authorities can edit, store, retrieve and analyze the data.

The records required by this regulation must be retained by the owner/operator for two years.

#### 5(c) Small Entity Flexibility

Based on review of the following sources, the actual number of small entities affected by this rule could not be determined: the promulgated rule notice in the <u>Federal Register</u> (57 <u>FR</u> 44496) on Monday, September 28, 1992; the Calciners and Dryers in Mineral Industries Background Information for Proposed Standards (1985); and a search of publicly-available current data sources. Based on the Background Information document, most of the mineral dryer and calciner industries do include small businesses.

The impact on small entities (i.e., small businesses) was taken into consideration during the development of the regulation. Due to technical considerations involving the process operations and the types of control equipment employed, the recordkeeping and reporting requirements are the same for both small and large entities. The Agency considers these to be the minimum requirements needed to ensure compliance and, therefore, cannot reduce them further for small entities. To the extent that larger businesses can use economies of scale to reduce their burden, the overall burden will be reduced.

#### 5(d) Collection Schedule

The specific frequency for each information collection activity within this request is shown below in Table 1: Annual Respondent Burden and Cost – NSPS for Calciners and Dryers in Mineral Industries (CFR Part 60, Subpart UUU) (Renewal).

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

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

The Agency may neither conduct nor sponsor, and a person is not required to respond to, a collection of information unless it displays a currently-valid OMB Control Number.

#### **6(a) Estimating Respondent Burden**

The average annual burden to industry over the next three years from these recordkeeping and reporting requirements is estimated to be 6,630 (Total Labor Hours from Table 1 below). These hours are based on Agency studies and background documents from the development of the regulation, Agency knowledge and experience with the NSPS program, the previously-approved ICR, and any comments received.

#### **6(b) Estimating Respondent Costs**

#### (i) Estimating Labor Costs

This ICR uses the following labor rates:

Managerial \$144.33 (\$68.73+ 110%) Technical \$108.28 (\$51.56 + 110%) Clerical \$53.34 (\$25.40 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2016, "Table 2. Civilian Workers, by occupational and industry group." The rates are from column 1, "Total compensation." The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.

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

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

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

Capital/Startup vs. Operation and Maintenance (O&M) Costs									
(A) Continuous Monitoring Device	(B) Capital/Startup Cost for One Respondent	(C) Number of New Respondents	(D) Total Capital/Startup Cost, (B X C)	(E) Annual O&M Costs for One Respondent	(F) Number of Respondents with O&M	(G) Total O&M, (E X F)			
CMS	\$4,000	0	\$0	\$650	167	\$109,000			

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

The total capital/startup costs for this ICR are \$0. This is the total of column D in the above table.

The total operation and maintenance (O&M) costs for this ICR are \$109,000. This is the total of column G.

The average annual cost for capital/startup and operation and maintenance costs to industry over the next three years of the ICR is estimated to be \$109,000. These are recordkeeping costs.

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

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

The average annual Agency cost during the three years of the ICR is estimated to be \$144,000.

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

 Managerial
 \$64.80 (GS-13, Step 5, \$40.50 + 60%)

 Technical
 \$48.08 (GS-12, Step 1, \$30.05 + 60%)

 Clerical
 \$26.02 (GS-6, Step 3, \$16.26 + 60%)

These rates are from the Office of Personnel Management (OPM), 2017 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees. Details upon which this estimate is based appear below in Table 2: Average Annual EPA Burden and Cost – NSPS for Calciners and Dryers in Mineral Industries (CFR Part 60, Subpart UUU) (Renewal).

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

Based on our research for this ICR, on average over the next three years, approximately 167 existing respondents will be subject to these standards. It is estimated that no additional respondents per year will become subject to these same standards. The overall average number of respondents, as shown in the table below, is 167 per year.

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

	Number of Respondents									
	Respondents That Submit Reports		Respondents That Do Not Submit Any Reports							
Year	(A) (B) Number of New Respondents <sup>1</sup> Existing Respondents		(C) Number of Existing Respondents that keep records but do not submit reports	(D) Number of Existing Respondents That Are Also New Respondents	(E) Number of Respondents (E=A+B+C-D)					
1	0	167	0	0	167					
2	0	167	0	0	167					
3	0	167	0	0	167					
Average	0	167	0	0	167					

<sup>&</sup>lt;sup>1</sup> New respondents include sources with constructed, reconstructed and modified affected facilities.

Column D is subtracted to avoid double-counting respondents. As shown above, the average Number of Respondents over the three-year period of this ICR is 167.

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

Total Annual Responses									
(A) Information Collection Activity	(B) Number of Respondents	(C) Number of Responses	(D) Number of Existing Respondents That Keep Records But Do Not Submit Reports	(E) Total Annual Responses E=(BxC)+D					
Notification of construction/reconstruction or modification	0	0	0	0					
Notification of actual startup	0	0	0	0					

Total Annual Responses								
Notification of demonstration of CMS	0	0	0	0				
Notification of physical or operational change	1	1	0	1				
Notification of initial performance test	0	0	0	0				
Notification of the repeat of the performance test	0	0	0	0				
Repeat of performance test results	0	0	0	0				
Semiannual reports	167	2	0	334				
			Total	335				

The number of Total Annual Responses is 335.

The total annual labor costs are \$696,000. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NSPS for Calciners and Dryers in Mineral Industries (CFR Part 60, Subpart UUU) (Renewal).

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

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

#### (i) Respondent Tally

The total annual labor hours are 6,630 hours. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NSPS for Calciners and Dryers in Mineral Industries (CFR Part 60, Subpart UUU) (Renewal).

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

Furthermore, the annual public reporting and recordkeeping burden for this collection of information is estimated to average 20 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are \$109,000. The cost calculations are detailed in Section 6(b)(iii), Capital/Startup vs. Operation and Maintenance (O&M) Costs.

#### (ii) The Agency Tally

The average annual Agency burden and cost over next three years is estimated to be

3,075 labor hours at a cost of \$144,000, see below in Table 2: Average Annual EPA Burden and Cost – NSPS for Calciners and Dryers in Mineral Industries (CFR Part 60, Subpart UUU) (Renewal).

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

# 6(f) Reasons for Change in Burden

There is a small increase in the total estimated burden and labor costs as currently identified in the OMB Inventory of Approved Burdens. This increase is not due to any program changes. The change in the burden and cost estimates occurred because this ICR assumes all existing respondents will have to familiarize with the regulatory requirements each year.

There is no change in methodology for estimating the capital/startup and O&M costs; however, this ICR rounds the total estimated cost to three significant figures. The rounding increases the O&M cost by \$450. Further, there is an increase of one response due to a correction. The previous ICR did not account for the notification of operational/physical change in calculating the number of responses.

#### 6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 20 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 neither conduct nor sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB Control Number. The OMB Control Numbers for EPA regulations are listed at 40 CFR Part 9 and 48 CFR Chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OECA-2014-0028. An electronic version of the public docket is available at <a href="http://www.regulations.gov/">http://www.regulations.gov/</a> which may be used to obtain a copy of the draft collection of information, submit or view public comments, access the index listing of the contents of the docket, and to access those documents in the public docket that are available

electronically. When in the system, select "search," then key in the docket ID number identified in this document. The documents are also available for public viewing at the Enforcement and Compliance Docket and Information Center in the EPA Docket Center (EPA/DC), WJC West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the docket center is (202) 566-1752. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OECA-2014-0028 and OMB Control Number 2060-0251 in any correspondence.

# Part B of the Supporting Statement

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

Table 1: Annual Respondent Burden and Cost – NSPS for Calciners and Dryers in Mineral Industries (40 CFR Part 60, Subpart UUU) (Renewal)

	(A)	(B)	(C)	(D)	(E)	<b>(F)</b>	(G)	(H)
Burden item	Technical person- hours per occurrence	No. of occurrences per respondent per year	Technical person- hours per responden t per year (C=AxB)	Respondents per year <sup>a</sup>	Technical person- hours per year (E=CxD)	Management person-hours per year (Ex0.05)	Clerical person- hours per year (Ex0.1)	Total Cost per year <sup>b</sup>
1. Applications	N/A							
2. Survey and Studies	N/A							
3. Reporting Requirements								
A. Familiarization with Regulatory Requirements <sup>c</sup>	1	1	1	167	167	8.35	16.7	\$20,178.69
B. Required Activities								
Initial performance test <sup>d</sup>	330	1	330	0	0	0	0	\$0
Repeat performance test <sup>e</sup>	330	1	330	0	0	0	0	\$0
Scrubber demonstration <sup>f</sup>	2	1	2	0	0	0	0	\$0
Reference Method 9 text <sup>g,h</sup>	18	1	18	0	0	0	0	\$0
Re-calibration of continuous opacity monitors (COM) <sup>i</sup>	4	2	8	0	0	0	0	\$0
Re-calibration of scrubber <sup>i,j</sup>	4	2	8	0	0	0	0	\$0
C. Create Information	See	2 3B						
D. Gather existing information	See 3B							
E. Write report								
Notification of construction/reconstruction or modification	2	1	2	0	0	0	0	\$0
Notification of actual startup	2	1	2	0	0	0	0	\$0

	(A)	(B)	(C)	(D)	(E)	<b>(F)</b>	(G)	(H)
Burden item	Technical person- hours per occurrence	No. of occurrences per respondent per year	Technical person- hours per responden t per year (C=AxB)	Respondents per year <sup>a</sup>	Technical person- hours per year (E=CxD)	Management person-hours per year (Ex0.05)	Clerical person- hours per year (Ex0.1)	Total Cost per year <sup>b</sup>
Notification of	2	1	2	0	0	0	0	\$0
demonstration of CMS			_					*****
Notification of physical or	2	1	2	1	2	0.1	0.2	\$241.66
operation change <sup>k</sup>	2	1	2	0	0	0	0	¢0
Notification of initial performance test	2	1	2	0	0	0	0	\$0
Notification of repeat	2	0.2	0.4	0	0	0	0	\$0
performance test								
Performance test report	8	1	8	0	0	0	0	\$0
Semiannual reports <sup>1</sup>	16	2	32	167	5,344	267.2	534.4	\$645,718.19
Subtotal for Reporting						6,340		\$666,139
Requirements								
4. Recordkeeping requirements								
A. Familiarization with Regulatory Requirements <sup>c</sup>	See	2 3A						
B. Plan activities	See	2 3B						
C. Implement activities	See	e 3B						
D. Develop record system	N	/A						
E. Time to enter information								
Records of startup, shutdowns, malfunctions <sup>m</sup>	1.5	1	1.5	167	250.5	12.53	25.05	\$30,268.04
F. Train to train personnel	N/A							
G. Audits	N/A							
Subtotal for Recordkeeping Requirements						288		\$30,268
TOTAL ANNUAL BURDEN AND COSTS (rounded) <sup>n</sup>						6,630		\$696,000

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Burden item	Technical person- hours per occurrence	No. of occurrences per respondent per year	Technical person- hours per responden t per year (C=AxB)	Respondents per year <sup>a</sup>	Technical person- hours per year (E=CxD)	Management person-hours per year (Ex0.05)	Clerical person- hours per year (Ex0.1)	Total Cost per year <sup>b</sup>
TOTAL CAPITAL AND								
O&M COST (see Section								
6(b)(iii)) (rounded) <sup>n</sup>								\$109,000
GRAND TOTAL (rounded) <sup>n</sup>								\$805,000

#### **Assumptions:**

- <sup>a</sup> We have assumed that the average number of respondents that will be subject to the rule over the three-year period of this ICR will be 167. It is estimated that no additional respondents will become subject to the regulation in the next three years.
- b This ICR uses the following labor rates: \$144.33 per hour for Executive, Administrative, and Managerial labor; \$108.28 per hour for Technical labor, and \$53.34 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2016, "Table 2. Civilian Workers, by occupational and industry group." The rates are from column 1, "Total Compensation." The rates have been increased by 110 percent to account for the benefit packages available to those employed by private industry.
- <sup>c</sup> We assume that each respondent will have to familiarize with the regulatory requirements each year.
- <sup>d</sup> We have assumed that it will take 330 hours to complete a performance test.
- <sup>e</sup> We have assumed that 20 percent of new respondents will have to conduct a CMS demonstration.
- <sup>f</sup> We have assumed that 20 percent of new respondents will take two hours to conduct a scrubber demonstration.
- $^{\rm g}$  We have assumed that 80 percent of new respondents will conduct a reference Method 9 test.
- $^{\mbox{\tiny h}}$  It will take respondents 18 hours to conduct a reference Method 9 test.
- <sup>i</sup> It will take 4 hours to re-calibrate either the COM or the scrubber.
- <sup>j</sup> We have assumed that 20 percent of new respondents will re-calibrate the scrubber.
- <sup>k</sup> We have assumed that one respondent will notify the Agency regarding a physical or operational change.
- <sup>1</sup> We have assumed that it will take 16 hours for each respondent to complete the semiannual report of exceedances.
- $^{\rm m}\,$  It will take each respondent 1.5 hours to record SSM information.
- <sup>n</sup> Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

Table 2: Average Annual EPA Burden and Cost – NSPS for Calciners and Dryers in Mineral Industries (40 CFR Part 60, Subpart UUU) (Renewal)

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
Burden item	Technical person hours per occurrence	Number of occurrences per year	Technical person hours per plant per year (C=AxB)	Plants per year <sup>a</sup>	Technical hours per year (E=CxD)	Managemen t hours per year (F=0.05xE)	Clerical hours per year (G=0.1xE)	Total Cost, per year <sup>b</sup>
Initial performance tests								
New or modified facility	40	1	40	0	0	0	0	\$0
Repeat performance tests								
New or modified facility	40	0.2	8	0	0	0	0	\$0
Report review								
New or modified facility								
Modification of construction/reconstruction or modification	2	1	2	0	0	0	0	\$0
Notification of actual startup	2	1	2	0	0	0	0	\$0
Notification of demonstration of CMS	2	1	2	0	0	0	0	\$0
Notification of physical or operational change <sup>c</sup>	2	1	2	1	2	0.1	0.2	\$107.84
Notification of initial performance test	2	1	2	0	0	0	0	\$0
Review demonstration of CMS <sup>d</sup>	4	1	4	0	0	0	0	\$0
Review test results <sup>e</sup>	8	1.2	9.6	0	0	0	0	\$0
Review of semiannual report of exceedances <sup>f</sup>	8	2	16	167	2672	133.6	267.2	\$144,079.58
TOTAL LABOR BURDEN AND COST (rounded) <sup>8</sup>						3,075		\$144,000

Assumptions:

- <sup>a</sup> We have assumed that the average number of respondents that will be subject to the rule over the three-year period of this ICR will be 167. It is estimated that no additional respondents will become subject to the regulation in the next three years.
- b This cost is based on the following hourly labor rates, increased by 60% to account for the benefit packages available to government employees: \$64.80 for Managerial (GS-13, Step 5, \$40.50+60%), \$48.08 for Technical (GS-12, Step 1, \$30.05 + 60%) and \$26.02 Clerical (GS-6, Step 3, \$16.26 + 60%). These rates are from the Office of Personnel Management (OPM) "2017 General Schedule" which excludes locality rates of pay.
- <sup>c</sup> We have assumed that one respondents will submit a notification of physical or operational change.
- <sup>d</sup> We have assumed that it will take four hours to review the CMS demonstration report.
- <sup>e</sup> We have assumed that it will take eight hours to review the performance test results.
- <sup>f</sup> It will take eight hours to review semiannual report of exceedances.
- <sup>8</sup> Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.