

**SUPPORTING STATEMENT  
ENVIRONMENTAL PROTECTION AGENCY**

**NESHAP for Coke Oven Pushing, Quenching, and Battery Stacks (40 CFR Part 63, Subpart CCCCC) (Renewal)**

**1. Identification of the Information Collection**

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

NESHAP for Coke Oven Pushing, Quenching, and Battery Stacks (40 CFR Part 63, Subpart CCCCC) (Renewal), EPA ICR Number 1995.05, OMB Control Number 2060-0521.

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

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for NESHAP for Coke Oven Pushing, Quenching, and Battery Stacks (40 CFR part 63, subpart CCCCC) were proposed on July 3, 2001 (66 FR 35325), promulgated on April 14, 2003 (68 FR18007), and amended on August 2, 2005 (70 FR 44285). These regulations apply to owners or operators of both existing and new coke plants that are major sources of hazardous air pollutant (HAP) emissions. The NESHAP applies to emissions from pushing, soaking, quenching, and battery stacks on both new and existing coke oven batteries. 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 63, subpart CCCCC.

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

Any owner/operator subject to the provisions of this part shall maintain a file of these measurements, and retain the file for at least five years following the date of such measurements, 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.

Based on our consultations with industry representatives, there is an average of 2.8 affected battery stacks 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 19 respondents per year (operating 58 by-product batteries and 10 non-recovery batteries) will be subject to the standard, and no additional respondent per year will become subject to the standard.

The active (previous) ICR had the following Terms of Clearance (TOC):

This request is approved for three years. Prior to resubmission of this information collection request for renewal, the agency should reassess estimates of burden taking into account recent experience with the program.

EPA has addressed each item of concern in the TOC by consulting with industry trade associations, and other interested parties.

The burden to the “Affected Public” may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Coke Oven Pushing, Quenching, and Battery Stacks (40 CFR Part 63, Subpart CCCCC) (Renewal). The burden to the “Federal Government” 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 – NESHAP for Coke Oven Pushing, Quenching, and Battery Stacks (40 CFR Part 63, Subpart CCCCC) (Renewal).

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

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

The EPA is charged under Section 112 of the Clean Air Act, as amended, to establish standards of performance for each category or subcategory of major sources and area sources of hazardous air pollutants. These standards are applicable to new or existing sources of hazardous air pollutants and shall require the maximum degree of emission reduction. In addition, section 114(a) states that the Administrator may require any owner/operator subject to any requirement of this Act to:

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

In the Administrator's judgment, hazardous air pollutant (HAP) emissions from coke plants either cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, the NESHAP was promulgated for this source category at 40 CFR part 63, subpart CCCCC.

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

The recordkeeping and reporting requirements in the standard 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 standard. Continuous emission monitors are used to ensure compliance with the 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 the Agency or delegated authority when a source becomes subject to the requirements of the regulations. The reviewing authority may then inspect the source to check if the pollution control devices are properly installed and operated, leaks are being detected and repaired and the standard is being met. The performance test may also be observed.

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

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

The requested recordkeeping and reporting are required under 40 CFR part 63, subpart CCCCC.

### **3(a) Non-duplication**

If the subject standards have not been delegated, the information is sent directly to the appropriate EPA regional office. Otherwise, the information is sent directly to the delegated state or local agency. If a state or local agency has adopted its own similar standards to implement the Federal standards, a copy of the report submitted to the state or local agency can be sent to the Administrator in lieu of the report required by the Federal standards. Therefore, duplication does not exist.

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

An announcement of a public comment period for the renewal of this ICR was published in the Federal Register (76 FR 26900) on May 9, 2011. No comments were received on the burden published in the Federal Register.

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

The Agency has consulted industry experts and internal data sources to project the number of affected facilities and industry growth over the next three years. The primary source of information as reported by industry, in compliance with the recordkeeping and reporting provisions in the standard, is the Online Tracking Information System (OTIS) which is operated and maintained by EPA's Office of Compliance. OTIS is EPA's database for the collection, maintenance, and retrieval of all compliance data. The growth rate for the industry is based on our consultations with the Agency's internal industry experts.

Industry trade associations and other interested parties were provided an opportunity to comment on the burden associated with the standard as it was being developed and the standard has been previously reviewed to determine the minimum information needed for compliance purposes. In developing this ICR, we contacted: 1) the American Coke and Coal Chemicals Institute, at (202) 452-7198; and 2) the Association for Iron & Steel Technology, at (724) 814-3062.

It is our policy to respond after a thorough review of comments received since the last ICR renewal as well as those submitted in response to the first Federal Register notice.

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

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

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

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

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

### 3(f) Confidentiality

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

### 3(g) Sensitive Questions

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

## 4. The Respondents and the Information Requested

### 4(a) Respondents/SIC Codes

The respondents to the recordkeeping and reporting requirements are owners or operators of existing and new coke plants. The United States Standard Industrial Classification (SIC) codes for the respondents affected by the standard and the corresponding North American Industry Classification System (NAICS) codes for owners or operators of existing and new coke plants are listed in the following table.

Standard (40 CFR Part 63, Subpart CCCCC)	SIC Codes	NAICS Codes
Iron and Steel Mills	3312	331111
All Other Petroleum and Coal Products Manufacturing	3312	324199

### 4(b) Information Requested

#### (i) Data Items

In this ICR, all the data that is recorded or reported is required by the NESHAP for Coke Oven Pushing, Quenching, and Battery Stacks (40 CFR Part 63, Subpart CCCCC).

A source must make the following reports:

Notifications	
Initial notification requirements	63.9(b)(1)
Notification of compliance status when a source becomes subject to the standard	63.9(h), 63.7340(a)
Notification that source is subject to special compliance requirements,	63.9(d)

<b>Notifications</b>	
if applicable	
Notification of performance test 1	63.7(b), 63.9(e), 63.5755(a)
Rescheduled of performance test	63.7(b)(2)
Demonstration of continuous monitoring system	63.9(g), 63.7340(a)
Change in information already provided	63.9(j)
Request for an extension of compliance with relevant standard	63.9(c)

<b>Reports</b>	
Application for approval of the construction or reconstruction of a new major affected source, or reconstruction of a major affected source	63.5(6)(d)
Performance test results	63.10(d)(2), 63.5755
Startup, shutdown and malfunction plan	63.6(e)(3), 63.7310(c)
Operation and maintenance plan for capture systems, control devices applied to pushing emissions, and by-product coke oven batteries	63.7300(b-c)
Immediate startup, shutdown and malfunction reports	63.6(e)(3), 63.734(d) 63.10(d)(5)
Plan for soaking emissions	63.7294
Plan to prevent green pushes from by-product coke oven batteries with horizontal flues	63.7292
Progress reports for compliance extension (if applicable)	63.6(i)1
Quarterly and semiannual compliance reports	63.7341(b-c)

A source must keep the following records:

<b>Recordkeeping</b>	
Startup, shutdown and malfunction plan	63.6(e)(3), 63.7342(a)(2)
All reports and notifications	63.10(b)(1), 63.7342(a)(1)
Records of startup, shutdown, and malfunction of process equipment	63.10(b)(2)(i), (iv), (v), 63.7342(a)(2)
Records of malfunctions of air pollution control equipment	63.10(b)(2)(ii)

<b>Recordkeeping</b>	
Any applicability determination that demonstrates why owner or operator believes source is unaffected	63.10(b)(3)
Records of maintenance of air pollution control equipment	63.10(b)(2)(iii)
Records of performance tests, performance evaluations, and opacity and visible emissions observations	63.10(b)(2)(viii), 63.7342(a)(3)
Five-year retention of records	63.10(b)(1), 1 63.7342(d)

### 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.

Also, regulatory agencies in cooperation with the respondents continue to create reporting systems to transmit data electronically. However, electronic reporting systems are still not widely used. At this time, it is estimated that approximately 10 percent of the respondents use electronic reporting.

### **(ii) Respondent Activities**

<b>Respondent Activities</b>
Read instructions.
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.
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.
Transmit, or otherwise disclose the information.

Currently sources are using monitoring and reporting equipment that provide parameter data in an automated way e.g., continuous parameter monitoring system. Although personnel at the source still need to evaluate the data, this type of monitoring equipment has significantly reduced the burden associated with monitoring and recordkeeping

## **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.

<b>Agency Activities</b>
Observe initial performance tests and repeat performance tests if necessary.
Review notifications and reports, including performance test reports, and excess emissions reports, required to be submitted by industry.
Audit facility records.
Input, analyze, and maintain data in the Online Tracking Information System (OTIS).

### **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, 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 is entered into OTIS which is operated and maintained by EPA's Office of Compliance. OTIS is EPA's database for the collection, maintenance, and retrieval of compliance data for approximately 125,000 industrial and government-owned facilities. EPA uses the OTIS for tracking air pollution compliance and enforcement by local and state regulatory agencies, EPA regional offices and EPA headquarters. EPA and its delegated Authorities can edit, store, retrieve and analyze the data.

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



### **5(c) Small Entity Flexibility**

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

### **5(d) Collection Schedule**

The specific frequency for each information collection activity within this request is shown below in Table 1: Annual Respondent Burden and Cost – NESHAP for Coke Oven Pushing, Quenching, and Battery Stacks (40 CFR Part 63, Subpart CCCCC) (Renewal).

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

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

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

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

The average annual burden to industry over the next three years from these recordkeeping and reporting requirements is estimated to be 25,879 hours (Total Labor Hours from Table 1 below). These hours are based on Agency studies and background documents from the development of the regulation, Agency knowledge and experience with the NESHAP program, the previously approved ICR, and any comments received.

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

#### **(i) Estimating Labor Costs**

This ICR uses the following labor rates:

Managerial	\$121.42 (\$57.82 + 110%)
Technical	\$99.14 (\$47.21 + 110%)
Clerical	\$49.81 (\$23.72 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2011, "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 the regulation. The annual operation and maintenance costs are the ongoing costs to maintain the monitors and other costs such as photocopying and postage.

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

<b>Capital/Startup vs. Operation and Maintenance (O&amp;M) Costs</b>						
(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)
Leak detectors	\$9,000	0	\$0	\$500	19	\$9,500
Continuous Opacity Monitors	\$37,000	0	\$0	\$8,421	19	\$159,999
Total			\$0			\$169,499

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 \$169,500 (rounded). 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 \$169,500 combined. These are the 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 \$9,536.

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

Managerial	\$62.27 (GS-13, Step 5, \$38.92 + 60%)
Technical	\$46.21 (GS-12, Step 1, \$28.88 + 60%)
Clerical	\$25.01 (GS-6, Step 3, \$15.63 + 60%)

These rates are from the Office of Personnel Management (OPM), 2011 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to government employees. Details upon which this estimate is based appear below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Coke Oven Pushing, Quenching, and Battery Stacks (40 CFR Part 63, Subpart CCCCC) (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 19 existing respondents will be subject to the standard. It is estimated that no additional respondents per year will become subject. The overall average number of respondents, as shown in the table below is 19 per year.

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

<b>Number of Respondents</b>					
Year	(A) Number of New Respondents <sup>1</sup>	(B) Number of Existing Respondents	(C) Number of Existing Respondents that keep records but do not submit reports	(D) Number of Existing Respondents That Are Also New Respondents	(E) Number of Respondents (E=A+B+C-D)
1	0	19	0	0	19
2	0	19	0	0	19
3	0	19	0	0	19
Average	0	19	0	0	19

<sup>1</sup> New respondent 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 19.

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

<b>Total Annual Responses</b>				
(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 compliance status	0	1	0	0
Notification/application of construction	0	1	0	0
Notification of actual startup	0	1	0	0
Notification of performance test and test plan	0	1	0	0
Report of performance test results	6.4	1	0	6.4
Report of semiannual compliance reports	19	2	0	38
Report of quarterly compliance reports	17	4	0	68
Report of startup, shutdown, malfunction	1	1	0	1
			Total	113.4

The number of Total Annual Responses is 113 (rounded).

The total annual labor costs are \$2,479,750. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Coke Oven Pushing, Quenching, and Battery Stacks (40 CFR Part 63, Subpart CCCCC) (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, respectively, and summarized below.

#### **(i) Respondent Tally**

The total annual labor hours are 25,879 at a cost of \$2,479,750. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Coke Oven Pushing, Quenching, and Battery Stacks (40 CFR Part 63, Subpart CCCCC) (Renewal).

Furthermore, the annual public reporting and recordkeeping burden for this collection of information is estimated to average 229 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are \$169,500

combined. 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 212 labor hours at a cost of \$9,536. See below Table 2: Average Annual EPA Burden and Cost – NESHAP for Coke Oven Pushing, Quenching, and Battery Stacks (40 CFR Part 63, Subpart CCCCC) (Renewal).

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

There is an increase in costs for both the respondents and the Agency from the most recently approved ICR. The increase in burden cost is due to adjustments in labor rates. This ICR uses updated labor rates from the Bureau of Labor Statistics to calculate burden costs.

There is an increase of 33 hours in labor hours for the Agency related to a mathematical error in calculating the number of compliance reports per plant per year in the previous ICR. There is no change in the estimation methodology for labor hours to the respondents in this ICR compared to the previous ICR. This is due to two considerations: 1) the regulations have not changed over the past three years and are not anticipated to change over the next three years; and 2) the growth rate for respondents is very low, negative, or non-existent.

### **6(g) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 229 hours per response. “Burden” means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB Control Number. The OMB Control Numbers for EPA regulations are listed at 40 CFR part 9 and 48 CFR chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID Number EPA–HQ–OECA–2011–0269. An electronic version of the public docket is available at <http://www.regulations.gov/> which may be used to obtain a copy of the draft

collection of information, submit or view public comments, access the index listing of the contents of the docket, and to access those documents in the public docket that are available electronically. When in the system, select “search,” then key in the docket ID number identified in this document. The documents are also available for public viewing at the Enforcement and Compliance Docket and Information Center in the EPA Docket Center (EPA/DC), EPA 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) 566-1927. 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–2011–0269 and OMB Control Number 2060-0521 in any correspondence.

### **Part B of the Supporting Statement**

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

**Table 1: Annual Respondent Burden and Cost – NESHAP for Coke Oven Pushing, Quenching, and Battery Stacks (40 CFR Part 63, Subpart CCCCC) (Renewal)**

Burden item	(A) Person hours per occurrence	(B) No. of occurrences per respondent per year	(C) Person hours per respondent per year (AxB)	(D) Respondents per year <sup>a</sup>	(E) Technical person- hours per year (CxD)	(F) Management person hours per year (Ex0.05)	(G) Clerical person hours per year (Ex0.1)	(H) Total Cost Per year <sup>b</sup>
1. Applications	N/A							
2. Survey and Studies	N/A							
3. Acquisition, Installation, and Utilization of Technology and Systems	40	1	40	0	0	0	0	\$0
4. Reporting Requirements								
A. Read instructions	2	1	2	0	0	0	0	\$0
B. Required activities <sup>c, d</sup>								
Method 5 performance test <sup>e, c</sup>	40	1.5	60	6.4	384	19.2	38.4	\$42,313.73
Startup, shutdown, malfunction plan	40	1	40	0	0	0	0	\$0
Operation and maintenance plans for by-product coke oven batteries and capture systems and control devices applied to pushing emissions	40	1	40	0	0	0	0	\$0
Work practice plan for batteries with horizontal flues (one plant)	40	1	40	1	40	2	4	\$4,407.68
Method 9 daily observations for fugitive pushing emissions <sup>f</sup>	2.8	365	1,022	17	17,374	868.7	1,737.4	\$1,914,475.81
Weekly sampling for total dissolved solids (TSD) <sup>g</sup>	2.3	52	119.6	19	2,272.4	113.62	227.24	\$250,400.30
Monthly inspections and maintenance of affected sources, control devices, and continuous parameter monitoring systems <sup>e</sup>	2	12	24	19	456	22.8	45.6	\$50,247.55
C. Create information	See 4B							
D. Gather existing information	See 4B							
E. Write report								
Notification of applicability	2	1	2	0	0	0	0	\$0

Notification of construction/reconstruction	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
Notification of special compliance Requirements	2	1	2	0	0	0	0	\$0
Compliance extension request	2	1	2	0	0	0	0	\$0
Notification of performance test <sup>c</sup>	2	1.5	3	0	0	0	0	\$0
Site-specific test plan	40	1	40	0	0	0	0	\$0
Notification of compliance status	8	1	8	0	0	0	0	\$0
NESHAP waiver application	N/A							
Report of performance test <sup>h</sup>	See 4B							
Semiannual compliance reports <sup>h</sup>	40	2	80	2	160	8	16	\$17,630.72
Quarterly compliance reports for battery stacks <sup>f</sup>	12	4	48	17	816	40.8	81.6	\$89,916.67
Emergency startup, shutdown, or malfunction reports <sup>i</sup>	4	1	4	1	4	0.2	0.4	\$440.77
<b>SUBTOTAL for Reporting Requirements</b>						<b>24,732.36</b>		
5. Recordkeeping Requirements								
A. Read instructions	See 4A							
B. Plan activities	3	1	3	0	0	0	0	\$0
C. Implement activities	12	1	12	0	0	0	0	\$0
D. Develop record system	3	1	3	0	0	0	0	\$0
E. Time to enter information	1	52	52	19	988	49.4	98.8	\$108,869.70
F. Time to train personnel	3	1	3	0	0	0	0	\$0
G. Time to adjust existing ways to comply with previously applicable requirements	3	1	3	0	0	0	0	\$0
H. Time to transmit or disclose information <sup>j</sup>	0.25	2	0.50	19	9.50	0.48	0.95	\$1,046.82
I. Time for audits	N/A							
<b>SUBTOTAL for Recordkeeping Requirements</b>						<b>1,147.13</b>		
<b>TOTAL LABOR BURDEN AND COST (Rounded)</b>						<b>25,879</b>		<b>\$2,479,750</b>



**Assumptions:**

<sup>a</sup> There is an average of 19 respondents (i.e., coke plants operating 58 by-product batteries and 10 non-recovery batteries). We have assumed that there will be no new sources subject to this regulation.

<sup>b</sup> This ICR uses the following labor rates: \$121.42 per hour for Executive, Administrative, and Managerial labor; \$99.14 per hour for Technical labor, and \$49.81 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2011, "Table 2. Civilian Workers, by Occupational and Industry group." The rates are from column 1, "Total Compensation." The rates have been increased by 110% to account for the benefit packages available to those employed by private industry.

<sup>c</sup> We have assumed that existing respondents have already comply with initial rule requirements and are in full compliance with periodic requirements including quarterly and semiannual reports. New respondents would have to comply with the initial rule requirements including notifications and performance tests for add-on control devices.

<sup>d</sup> Monitoring and recordkeeping of operations for respondents include: monthly inspection of capture and control systems; daily Method 9 observations; weekly sampling for dissolved solids for quenching operations; work practices for batteries with horizontal flues (one plant); and Method 5 testing for particulate matter.

<sup>e</sup> The rule requires that every 2.5 years (or 0.4 times per year over the 3 years of the ICR), each control device applied to pushing emissions must be sampled by Method 5 for particulate matter. We have determined that there is an average of 1.5 emission points (24 control devices for 16 respondents =  $24/16 = 1.5$  per respondent) that need to be tested. There is an average of 6.4 respondents per year ( $16*0.4$ ) submitting Method 5 performance test reports.

<sup>f</sup> Daily Method 9 observations of 4 pushes per battery stacks one hour per day per battery. We have assumed that 38 of the 53 battery stacks at 17 plants will have burden that can be attributed to the rule since the other plants were doing this type of monitoring before the rule. There is an average of 2.8 battery stacks per plant required to be tested for Method 9 for the burden calculation although we know that a few plants have a pair of batteries served by one stack.

<sup>g</sup> The measuring of the total dissolved solids (TDS) in the make-up water used for quenching is a requirement. Since there are about 43 quenching towers (average over the 19 respondents is about 2.3 quenching towers per facility).

<sup>h</sup> The rules requires the submittal of quarterly compliance reports for all battery stacks. If no deviation occurred and no continuous monitoring systems were out of control, only a summary report is required. There is an average of 6.4 respondents per year ( $16*0.4$ ) submitting Method 5 performance test reports. For other affected sources, semiannual reports are required for any deviation from an emission limitation (including an operating limit), work practice standard, or O&M requirement.

<sup>i</sup> It assumes that one respondent per year will have a startup, shutdown and malfunction (SSM) occurrence that is not managed according to the SSM plan.

<sup>j</sup> It assumes 15 minutes to transmit recorded information

**Table 2: Average Annual EPA Burden and Cost – NESHAP for Coke Oven Pushing, Quenching, and Battery Stacks (40 CFR Part 63, Subpart CCCCC) (Renewal)**

Burden item	(A) Person hours per occurrence	(B) No. of occurrences per plant per year	(C) Hours per plant per year (AxB)	(D) Plants per year <sup>a</sup>	(E) Technical person- hours per year (Cx D)	(F) Management person hours per year (Ex0.05)	(G) Clerical person hours per year (Ex0.1)	(H) Total Cost Per year <sup>b</sup>
Initial performance test	40	1	40	0	0	0	0	\$0
Repeat performance test-Retesting preparation	2	1	2	0	0	0	0	\$0
Repeat performance- Retesting	40	1	40	0	0	0	0	\$0
Report Review								
Notification of construction/reconstruction	N/A							
Notification of anticipated startup	N/A							
Notification of actual startup	N/A							
Notification of special compliance requirements	N/A							
Notification of initial performance test	2	1	2	0	0	0	0	\$0
Notification of compliance status <sup>d</sup>	2	1	2	0	0	0	0	\$0
Review of repeat Method 5 performance test report <sup>f</sup>	8	1	8	6.4	51.2	2.56	5.12	\$2,653.41
Review of semi-annual compliance report <sup>d</sup>	8	0.4	3.2	19	60.8	3.04	6.08	\$3,150.93
Review of NESHAP waiver application	2	1	2	0	0	0	0	\$0
Review of quarterly compliance report for battery stacks <sup>f</sup>	4	1	4	17	68	3.4	6.8	\$3,524.07
Review of emergency startup, shutdown, and malfunction report <sup>g</sup>	4	1	4	1	4	0.2	0.4	\$207.30
<b>TOTAL ANNUAL BURDEN AND COST</b>						<b>212</b>		<b>\$9,536</b>

**Assumptions:**

<sup>b</sup> This cost is based on the following labor rates which incorporates a 1.6 benefits multiplication factor to account for government overhead expenses: Managerial rate of \$62.27 (GS-13, Step 5, \$38.92 + 60%), Technical rate of \$46.21 (GS-12, Step 1, \$28.88 + 60%), and Clerical rate of \$25.01 (GS-6, Step 3, \$15.63 + 60%). These rates are from the Office of Personnel Management (OPM) “2011 General Schedule” which excludes locality rates of pay.

<sup>c</sup> We have assumed that existing sources have comply with the initial rule requirements. New respondents are required to conduct performance test for add-on control equipments, submit initial notifications and prepare startup, shutdown and malfunction (SSM) plans.

<sup>d</sup> Every 2.5 years (or about 0.4 times per year, if average over the three year period of ICR), respondents must sample each emission point using Method 5 for particulate matter, and submit a report of results.

<sup>e</sup> Sources are required to submit semiannual compliance reports and startup, shutdown and malfunction (SSM) reports if there is an occurrence that is not managed according to the SSM plan.

<sup>f</sup> The rules requires the submittal of quarterly compliance reports for battery stacks. There is an average of 6.4 respondents per year ( $16 \times 0.4$ ) submitting Method 5 performance test reports.

<sup>g</sup> It assumes that one respondent will have a startup, shutdown and malfunction (SSM) occurrence that is not managed according to the SSM plan.