

**SUPPORTING STATEMENT  
ENVIRONMENTAL PROTECTION AGENCY**

**NESHAP for Carbon Black, Ethylene, Cyanide and Spandex (40 CFR Part 63, Subpart YY) (Renewal)**

**1. Identification of the Information Collection**

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

NESHAP for Carbon Black, Ethylene, Cyanide and Spandex (40 CFR Part 63, Subpart YY) (Renewal), EPA ICR Number 1983.07, OMB Control Number 2060-0489.

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

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Generic Maximum Achievable Control Technology (GMACT) Standards published at 40 CFR Part 63, Subpart YY were promulgated on July 12, 2002 (67 FR 46257) and amended on April 13, 2005 (70 FR 19266). These regulations apply to existing and new carbon black (CB), cyanide (CY), ethylene (ET), and spandex (SP) facilities that would be subject to the major source provisions specified under the GMATC NESHAP. New facilities include those that commenced construction or reconstruction after the date of proposal. This information is being collected to assure compliance with 40 CFR Part 63, Subpart YY.

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.

Over the next three years, an average of 61 respondents per year will be subject to the standard, and no additional respondents per year will become subject to the standard. A file of these measurements will be retained 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 United States Environmental Protection Agency (EPA) regional office. This estimate consists of 18 CB production facilities, 26 ET production facilities, 14 CY production facilities, and 3 SP production facilities.

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.

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

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

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

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

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

In the Administrator's judgment, hazardous air pollutant (HAP) emissions from CB production, CY chemicals manufacturing, ET production, and SP production source categories cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, the NESHAP were promulgated for this source category at 40 CFR Part 63, Subpart YY.

### **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 and/or leaks are being detected and repaired 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. Nonduplication, Consultations, and Other Collection Criteria**

#### **3(a) Nonduplication**

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, no duplication 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 *Federal Register* (79 FR 30117) on May 27, 2014. One public comment was received; the commenter opposed any new regulation or rule changes. This ICR renewal does not involve any changes in the standard.

#### **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 Enforcement and Compliance History Online (ECHO), which is operated and maintained by EPA's Office of Compliance. ECHO 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 the American Chemistry Council at (202) 249-7000 and the Continental Carbon Company at (281) 647-3700.

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. The comment received and our response may be found in Section 3(b) above and the docket for this ICR at <http://www.fdms.gov>.

### **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 with the Part 70 permit program and the five year statute of limitations on which the permit program is based. The retention of records for five years allows EPA to establish the compliance history of a source, any pattern of non-compliance and to determine the appropriate level of enforcement action. EPA has found that the most flagrant violators have violations extending beyond five years. In addition, EPA would be prevented from pursuing the violators due to the destruction or nonexistence of essential records.

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

Any information submitted to the Agency for which a claim of confidentiality is made will be safeguarded according to the Agency policies set forth in Title 40, chapter 1, part 2, subpart B - Confidentiality of Business Information (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 CB, CY, ET, and SP production facilities. The United States Standard Industrial Classification (SIC) codes for the respondents affected by the standards and their corresponding North American Industry

Classification System (NAICS) codes are listed below.

<b>Standard (40 CFR Part 63, Subpart YY)</b>	<b>SIC Codes</b>	<b>NAICS Codes</b>
Carbon Black Manufacturing (CB)	2895	325182
All Other Basic Inorganic Chemical Manufacturing / All Other Basic Organic Chemical Manufacturing (CY)	2819/2869	325188/325199
Petrochemical Manufacturing (ET)	2869	325110
Noncellulosic Organic Fiber Manufacturing (SP)	2824	325222

#### **4(b) Information Requested**

##### **(i) Data Items**

In this ICR, all the data that is recorded or reported is required by the NESHAP for Source Categories: Generic Maximum Achievable Control Technology Standards for Carbon Black, Ethylene, Cyanide and Spandex (40 CFR Part 63, Subpart YY).

A source must make the following reports:

<b>Notifications</b>	
Notification and application of construction or reconstruction.	63.5 63.1110(a)
Notification of anticipated date of initial startup.	63.5
Notification of actual date of initial startup (if not submitted under 63.5)	63.1110(a), 63.1110(b)
Initial Notification	63.1110(a), 63.1110(c)
Notification of performance evaluation and performance test dates	63.1110(a)
Operating parameter value and rationale selection	63.1110(a), 63.1111

<b>Reports</b>	
Initial Compliance Status Report	63.1110(a), 63.1110(d)
Performance test and performance evaluation results	63.1110(a)(9), 63.987(c), 63.988(b), 63.997(a)
Semiannual reports	63.1090, 63.1110(e)
Startup, shutdown, and malfunction (SSM) reports	63.1110(a), 63.1111

<b>Reports</b>	
Excess emissions and CPMS performance summary report	63.1110(a)

A source must keep the following records:

<b>Recordkeeping</b>	
Records of verification of DOT tank certification or Method 27 of appendix A to 40 CFR Part 60 testing	63.1105(i)
Records of maintenance	63.1109(a), 63.1090(b)-(e)
Records of startup, shutdown and malfunction and actions taken	63.998(d)
Records of continuous monitoring and compliance	63.998(b), 63.998(c)
Records of non-flare control and recovery device regulated source monitoring	63.998(c)
Records of closed vent systems	63.998(d)
Records of storage vessel and transfer racks	63.998(d)
Records of equipment leaks	63.998(d)
Records of monitored parameters out of range	63.998(d)
Records of malfunctioning or inoperative CPMS	63.998(c)
Records of CPMS operation, adjustments, calibration checks, and maintenance	63.998(c)
Records of performance test and performance evaluation results	63.998(a)
Records of initial and compliance status notifications	63.998(a)
General and specific equipment leak records	63.1038(b)-(c)
Records of vessel dimensions and capacity	63.1065(a)
Records of floating roof inspection results for storage vessels (tanks)	63.1065(b)
Records of floating roof landing	63.1065(c)
Records of monitoring data required by 63.1086 on leak detection	63.1089(a)
Records of leak repair, including the method or procedure and date of repair	63.1089(b)-(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 20 percent of the respondents use electronic reporting.

**(ii) Respondent Activities**

<b>Respondent Activities</b>
Read instructions.
Install, calibrate, maintain, and operate CPMS for the appropriate control device.
Perform initial performance 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.

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

<b>Agency Activities</b>
Audit facility records.
Input, analyze, and maintain data in Integrated Compliance Information System (ICIS) and ECHO.

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

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

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

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 in below Table 1: Annual Respondent Burden and Cost – NESHAP for Source

Categories: Generic Maximum Achievable Control Technology Standards for Carbon Black, Ethylene, Cyanide and Spandex (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. Where appropriate, specific tasks and major assumptions have been identified. Responses to this information collection are mandatory.

### **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 41,753 (Total Labor Hours from Table 1). 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	\$129.93 (\$61.87 + 110%)
Technical	\$103.97 (\$49.51 + 110%)
Clerical	\$51.79 (\$24.66 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2014, "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 monitor(s) 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) Source Category with CMS <sup>1</sup>	(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)
CB	N/A	0	\$0	\$9,545	18	\$171,810
CY	N/A	0	\$0	\$9,545	14	\$133,630
ET	N/A	0	\$0	\$734	26	\$19,084
SP	N/A	0	\$0	\$8,811	3	\$26,433
TOTAL	-	0	\$0	-	61	\$350,957

<sup>1</sup> Continuous monitoring system

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

The total operation and maintenance (O&M) costs for this ICR are \$350,957. 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 \$350,957. These are recordkeeping costs.

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

The only costs to the Agency are 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 \$160,893.

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

Managerial	\$62.90 (GS-13, Step 5, \$39.31 + 60%)
Technical	\$46.67 (GS-12, Step 1, \$29.17 + 60%)
Clerical	\$25.25 (GS-6, Step 3, \$15.78 + 60%)

These rates are from the Office of Personnel Management (OPM), 2014 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 Source

Categories: Generic Maximum Achievable Control Technology Standards for Carbon Black, Ethylene, Cyanide and Spandex (Renewal).

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

On average over the next three years, approximately 61 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 61 per year. This estimate includes 18 CB, 26 ET, 14 CY and 3 SP production facilities.

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) 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) <sup>2</sup> Number of Existing Respondents That Are Also New Respondents	(E) Number of Respondents (E=A+B+C-D)
1	0	61	0	0	61
2	0	61	0	0	61
3	0	61	0	0	61
Average	0	61	0	0	61

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

<sup>2</sup> Column D is subtracted to avoid double-counting respondents.

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
Initial notification	0	1	0	0
Notification of construction or reconstruction	0	1	0	0
Notification of anticipated startup	0	1	0	0
Notification of actual startup	0	1	0	0
Notification of performance evaluation and performance test dates	0	1.1	0	0
Operating parameter and rationale selection	0	1	0	0
Notification of compliance status and initial compliance status report	0	1	0	0
Performance test results	0	1.1	0	0
Semiannual and periodic report	61	2	0	122
Excess emissions and continuous monitoring system performance report and summary report	61	2	0	122
Immediate SSM report	3	1	0	3
			<b>Total</b>	<b>247 (rounded)</b>

The number of Total Annual Responses is 247.

The total annual labor costs are \$4,198,741. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Source Categories: Generic Maximum Achievable Control Technology Standards for Carbon Black, Ethylene, Cyanide and Spandex (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 41,753. Details regarding these estimates may be found in Table 1. Annual Respondent Burden and Cost – NESHAP for Source Categories: Generic Maximum Achievable Control Technology Standards for Carbon Black, Ethylene, Cyanide and Spandex (Renewal).

Furthermore, the annual public reporting and recordkeeping burden for this collection of information is estimated to average 169 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are \$350,957. 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 3,535 labor hours at a cost of \$160,893. See Table 2: Average Annual EPA Burden and Cost – NESHAP for Source Categories: Generic Maximum Achievable Control Technology Standards for Carbon Black, Ethylene, Cyanide and Spandex (Renewal).

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

There is an increase of 28,229 hours in the total estimated respondent burden compared with the ICR currently approved by OMB. The respondent burden hours and costs increased because the previous ICR substantially underestimated the time and effort to collect, compile and maintain records and information required by the standard. There is a small decrease in O&M cost due to a change in the number of sources subject to the standard. Our estimate indicates the number of ethylene production facilities has decreased from 37 to 26.

This ICR also corrects several inconsistencies in the frequency of performance test and test reports. The previous ICR contained several errors in the types of notification and report, and did not correctly account for all notifications and reports shown in Table 1 when calculating the number of responses. This correction results in an adjustment increase in the estimated number of responses.

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

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 169 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-2014-0082. 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 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) 566-1927. 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-2014-0082 and OMB Control Number 2060-0489 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 Source Categories: Generic Maximum Achievable Control Technology Standards for Carbon Black, Ethylene, Cyanide and Spandex (Renewal)**

REPORTING / RECORDKEEPING REQUIREMENT	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Person-hours per occurrence	No. of occurrences per respondent per year	Person-hours per respondent	Respondent per year	Technical person-hours	Managerial person-hours	Clerical person-hours	Cost, \$
			(A) x (B)		(C) x (D)	(E) x 0.05	(E) x 0.10	
1. APPLICATIONS	N/A							
2. SURVEY AND STUDIES	N/A							
3. REPORTING REQUIREMENTS								
a. Read Instructions	1	1	1	0	0	0	0	\$0
b. Required Activities								
Initial Performance Tests	57	1	57	0	0	0	0	\$0
Repeat of Performance Tests	57	0.1	5.7	0	0	0	0	\$0
Startup, Shutdown and Malfunction Plan	40	1	40	61	2,440	122	244	\$282,175.02
c. Create Information	Included in 3b							
d. Gather Existing Information	Included in 3b							
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 Performance Test Dates	2	1.1	2.2	0	0	0	0	\$0
Notification of Operating Parameter Value and Rationale Selection	2	1	2	0	0	0	0	\$0
Notification of Compliance Status	2	1	2	0	0	0	0	\$0
Report of Initial Performance Test Results	8	1.1	8.8	0	0	0	0	\$0
Reporting Results of Continuous Monitoring System Performance Report and Summary Report	Included in 3b							
Periodic and Semiannual Reports	8	2	16	61	976	48.8	97.6	\$112,870.01

REPORTING / RECORDKEEPING REQUIREMENT	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Person-hours per occurrence	No. of occurrences per respondent per year	Person-hours per respondent	Respondent per year	Technical person-hours	Managerial person-hours	Clerical person-hours	Cost, \$
			(A) x (B)		(C) x (D)	(E) x 0.05	(E) x 0.10	
Excess Emissions and Continuous Monitoring System Performance Report and Summary Report	8	2	16	61	976	48.8	97.6	\$112,870.01
Periodic Startup, Shutdown, Malfunction Report	Included in Excess Emissions Report							
Immediate Startup, Shutdown, Malfunction Reports	4	1	4	3	12	0.6	1.2	\$1,387.75
Request for Waiver of Reporting and Recordkeeping	4	1	4	0	0	0	0	\$0
<b>Reporting Subtotal</b>						<b>5,065</b>		<b>\$509,302.78</b>
<b>4. RECORDKEEPING REQUIREMENTS</b>								
a. Read Instructions	-----Included in 3b-----							
b. Plan Activities	-----Included in 3b-----							
c. Implement Activities	-----Included in 3b-----							
d. Develop Record System	N/A							
e. Time to Enter Information								
Records of SS&M	1.5	52	78	61	4,758	237.9	475.8	\$550,241.29
Records of CMS	1	365	365	61	22,265	1,113.25	2,226.5	\$2,574,847.06
Collect and compile data	24	2	48	61	2,928	146.4	292.8	\$338,610.02
Enter / verify information for semiannual reports	16	2	32	61	1,952	97.6	195.2	\$225,740.02
f. Train Personnel	N/A							
g. Audits	N/A							
<b>Recordkeeping Subtotal</b>						<b>36,688</b>		<b>\$3,689,438.39</b>
<b>TOTAL LABOR BURDEN AND COST (rounded)</b>						<b>41,753</b>		<b>\$4,198,741</b>

REPORTING / RECORDKEEPING REQUIREMENT	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Person-hours per occurrence	No. of occurrences per respondent per year	Person-hours per respondent	Respondent per year	Technical person-hours	Managerial person-hours	Clerical person-hours	Cost, \$
			(A) x (B)		(C) x (D)	(E) x 0.05	(E) x 0.10	
<b>Capital and O&amp;M Cost</b>								\$350,957
<b>GRAND TOTAL</b>								<b>\$4,549,698</b>

**Assumptions**

Number of affected facilities*	61
Time required to read instructions (hours)	1
Time required to complete performance test (hours)	57
Periodic performance test (hours)	40
Performance test reports (hours)	8
Rate of failed performance tests (repeat)	10%
Estimated hours to prepare the Startup/Shutdown/Malfunction	40
Estimated number of sources at an affected facility that require visual emissions and opacity	61
Time required to prepare notifications (hours)	2
Number of new facilities (per year)	0
Time required to prepare periodic (semiannual) reports (hours)	8
Time required to prepare excess emissions reports (hours)	8
Time required to prepare immediate startup, shutdown, and malfunction reports (hours)	4
Time required to collect and compile information required by standard (hours)	24

\* Affected facilities consist of 18 manufacturing carbon black, 14 manufacturing cyanide, 26 manufacturing ethylene, and 3 manufacturing spandex.

N/A = Not Applicable.

**Table 2: Average Annual EPA Burden and Cost – NESHAP for Source Categories: Generic Maximum Achievable Control Technology Standards for Carbon Black, Ethylene, Cyanide and Spandex (Renewal)**

REPORTING/RECORDKEEPING REQUIREMENT	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Person-hours per occurrence	No. of occurrences per respondent per year	Person-hours per respondent	Respondent per year	Technical person-hours	Managerial person-hours	Clerical person-hours	Cost, \$
			(A) x (B)		(C) x (D)	(E) x 0.05	(E) x 0.10	
<b>INITIAL PERFORMANCE TESTS</b>								
New or Modified Facility	5	1	5	0	0	0	0	\$0
Repeat of Performance Tests	5	0.1	0.5	0	0	0	0	\$0
<b>REPORT REVIEW</b>								
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 Performance Test Dates	2	1.1	2.2	0	0	0	0	\$0
Notification of Operating Parameter Value and Rationale Selection	2	1	2	0	0	0	0	\$0
Notification of Compliance Status	2	1	2	0	0	0	0	\$0
Review Report of Initial Performance Test	5	1.1	5.5	0	0	0	0	\$0
Review Reporting Results of Continuous Monitoring System Performance Report and Summary Report	Included in Review of Performance Test Report							
Review Periodic (Semiannual) Reports	5	2	10	61	610	30.5	61	\$31,927.40
Review Excess Emission Report and Continuous Monitoring System Performance Report and Summary Report	20	2	40	61	2,440	122	244	\$127,709.60

REPORTING/RECORDKEEPING REQUIREMENT	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	Person-hours per occurrence	No. of occurrences per respondent per year	Person-hours per respondent	Respondent per year	Technical person-hours	Managerial person-hours	Clerical person-hours	Cost, \$
			(A) x (B)		(C) x (D)	(E) x 0.05	(E) x 0.10	
Review Periodic Startup, Shutdown, Malfunction Report	Included in Review of Performance Test Report							
Review Immediate Startup, Shutdown, Malfunction Report	8	1	8	3	24	1.2	2.4	\$1,256.16
Review Request for Waiver of Reporting and Recordkeeping	2	1	2	0	0	0	0	\$0
Subtotal					3,074	153.7	307.4	\$160,893.16
<b>TOTAL</b>					<b>3,535</b>			<b>\$160,893</b>

**Assumptions**

Number of affected facilities *	61
Time required to review notifications (hours)	2
Time required to oversee performance test (hours)	5
Time required to review performance test report (hours)	5
Rate of failed performance tests (repeat)	10%
Time required to review Excess Emissions Report, Continuous Monitoring Reports, and Summary Reports (hours)	20
Estimated number of facilities that submit immediate SSM reports	3
Time required to review the immediate startup/shutdown/malfunction report (hours)	8
Time required to review periodic (semiannual) reports	5

\* Affected facilities consist of 18 manufacturing carbon black, 14 manufacturing cyanide, 26 manufacturing ethylene, and 3 manufacturing spandex.