

**SUPPORTING STATEMENT  
ENVIRONMENTAL PROTECTION AGENCY**

**NESHAP for Mercury Cell Chlor-Alkali Plants (40 CFR Part 63, Subpart IIIII) (Renewal)**

**1. Identification of the Information Collection**

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

NESHAP for Mercury Cell Chlor-Alkali Plants (40 CFR Part 63, Subpart IIIII) (Renewal), EPA ICR Number 2046.05, OMB Control Number 2060-0542

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

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Mercury Emissions from Mercury Cell Chlor-Alkali plants were promulgated on December 19, 2003. These standards apply to existing facilities and new facilities that are part of major source of hazardous air pollutant (HAP) emissions or a part of an area source of HAP emissions. This information is being collected to assure compliance with 40 CFR part 63, subpart IIIII.

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 United States Environmental Protection Agency (EPA) regional office.

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).

The chlorine production source category is divided into two subcategories: (1) mercury cell chlor-alkali plants and (2) chlorine production plants that do not rely upon mercury cells for chlorine production (e.g., diaphragm cell chlor-alkali plants, membrane cell chlor-alkali plants). This Information Collection Request (ICR) only addresses the mercury cell chlor-alkali subcategory. The affected facilities were required to be in compliance with the standard within three years of the effective date (promulgation date).

This ICR is based on nine existing mercury cell chlor-alkali plants in the United States which were considered to be a part of the mercury cell chlor-alkali plant source category for

regulatory development. It is believed that no new mercury cell chlor-alkali plants will be constructed over the next three years, an assertion which is based on the fact that no new plants have been constructed in the United States in over the last 30 years. Future demand for chlor-alkali production is anticipated to be met using other types of chlor-alkali cells that do not result in any mercury emissions and, therefore, are not covered by this standard. Therefore, no new or reconstructed plants are anticipated.

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, mercury emissions from mercury cell chlor-alkali plants 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 IIII.

### **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 requirements. Continuous emission monitors are used to

ensure compliance at all times.

The notifications required in the standards are used to inform the Agency or delegated authority when a source becomes subject to the requirements of the standard. 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 63, subpart IIII.

#### **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, 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 at 74 FR 32580 on July 8, 2009. No comments were received on the burden published in the Federal Register.

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

The primary source of information as reported by industry, in compliance with the recordkeeping and reporting provisions in the standard, is the AFS (AIRS Facility Subsystem) which is operated and maintained by EPA's Office of Compliance. AFS is EPA's database for the collection, maintenance, and retrieval of all compliance data. Approximately nine respondents are currently subject to the regulation, and our previous consultations with Agency industry experts regarding the growth rate for the industry indicated that no additional respondents will become subject to the regulation over the next three years.

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.

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. In this 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 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 were 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 (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 & NAICS Codes**

The respondents to the recordkeeping and reporting requirements are source category description. The United States Standard Industrial Classification (SIC) code for the respondents affected by the standards is SIC 2812 which corresponds to the North American Industry Classification System (NAICS) 325181 for source category description.

<b>Standard</b>	<b>SIC Code</b>	<b>NAICS Code</b>
40 CFR part 63, subpart IIIII	2812	325181

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

None of these reporting or recordkeeping requirements violate any of the regulations established by OPM at 5 CFR part 1320, section 1320.5.

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

In this ICR, all the data that is recorded or reported is required by NESHAP for Mercury Cell Chlor-Alkali Plants (40 CR part 63, subpart IIIII).

A source must make the following reports:

<b>Notifications</b>	
Initial startup or conversion of minor source to major source	63.9(b)
Application of construction or reconstruction	63.9(b)
Request for extension of compliance	63.9(c)
Subject to special compliance requirements	63.9(d)
Performance tests	63.7(b), (c), 63.9(e)
Performance evaluation of continuous monitoring systems	63.8(e), (f)
Continuous monitoring systems dates of operation	63.9(g)
Initial compliance	63.8252(e)
Compliance status	63.9(h)

<b>Reports</b>	
Report of performance evaluations	63.7(g), 63.10d) ( 2)
Immediate startup, shutdown and malfunction	63.8254(c)
Semiannual reports	63.8254(a), (b)

A source must keep the following records:

<b>Recordkeeping</b>	
Notifications and reports	63.8256(a)
Maintain records of monitoring data, monitoring system calibration checks, occurrence and duration of periods where the monitoring system is malfunctioning or inoperative and system operations	63.8256(a), 63.8256(b)
Work practice standards	63.8256(c)
Periodic monitoring option	63.8256(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.

In addition, 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.
Install, calibrate, maintain, and operate opacity and/or parameter monitors.
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.

<b>Respondent Activities</b>
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.

<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 AIRS Facility Subsystem (AFS).

### **5(b) Collection Methodology and Management**

Following the notification of startup, the reviewing authority may inspect the affect facility 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. Immediate startup, shutdown and malfunction notifications and reports alert the Agency to atypical operations conditions which result in violations of the emission limitations. 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 the AFS which is operated and maintained by EPA's Office of Compliance. AFS 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 AFS 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**

The impact on small entities (i.e., small businesses) was taken into consideration during the development of the regulation. In the final rulemaking notice, EPA prepared a regulatory flexibility analysis (FRFA) which examined the impact of the final rule on small entities (See 68 FR 70925, December 19, 2003). EPA determined that two of the seven companies that own mercury chlor-alkali plants are small entities, representing 29 percent of the affected companies. This percentage was applied to the total number of mercury cell chlor-alkali plants affected by this ICR. It is estimated that there will be an average of 9 mercury cell chlor-alkali plants, and EPA estimates that 3 (rounded) of these plants are owned by small entities.

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 Cost - NESHAP for Mercury Cell Chlor-Alkali Plants (40 CFR part 63, subpart IIII) (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.

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 14,553 (rounded) person-hours (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	\$114.77 (\$54.65 + 110%)
Technical	\$97.59 (\$46.47 + 110%)
Clerical	\$48.26 (\$22.98 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, March 2009, "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.

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

The type of industry costs associated with the information collection activities in the subject standards 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 include 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/Startu p 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)
Mercury Concentratio n CMS	\$17,000	0	\$0	\$7,300	9	\$65,700
Cell Room Mercury Monitoring System	\$56,000	0	\$0	\$900	9	\$8,100
						\$73,800

There are no total capital/startup costs associated with this ICR. The total operation and maintenance (O&M) costs for this ICR are \$73,800. 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 \$73,800.

### 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 \$10,937 (rounded).

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

	Managerial	\$61.36 (GS-13, Step 5, \$38.35 + 60%)
Technical		\$45.52 (GS-12, Step 1, \$28.45 + 60%)
Clerical		\$24.64 (GS-6, Step 3, \$15.40 + 60%)

These rates are from the Office of Personnel Management (OPM), "2009 General Schedule" which excludes locality rates of pay. The rates have been increased by 60 to account for the benefit packages available to government employees. These rates can be obtained from the OPM web site, <http://www.opm.gov/oca/payrates/index/htm>. Details upon which this estimate is based appear below in Table 2: Annual Agency Burden and Cost - NESHAP for Mercury Cell Chlor-Alkali Plants (40 CFR part 63, subpart IIIII) (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 nine (9) existing respondents will be subject to the standard. It is estimated that no additional respondents will become subject over the three period covered by this ICR.

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) Number of Existing Respondents That Are Also New Respondents	(E) Number of Respondents (E=A+B+C-D)
1	0	9	0	0	9
2	0	9	0	0	9
3	0	9	0	0	9
Average	0	9			9

<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 nine.

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
Notifications	0	0	0	0
Startup, Shutdown and Malfunction	0	0	0	0
Compliance Report (Semiannual)	9	2	0	18
			Total	18

The number of Total Annual Responses is eighteen.

The total annual labor costs are \$1, 417,912. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost - NESHAP for Mercury Cell Chlor-Alkali Plants (40 CFR part 63, subpart IIIII) (Renewal).

The total annual capital/startup and O&M costs to the regulated entities are \$73,800. The cost calculations are detailed in Section 6(b)(iii), Capital/Startup vs. Operation and Maintenance (O&M) Costs.

The average annual Agency burden and cost over next three years is estimated to be 234 labor hours at a cost of \$10,937. See below Table 2: Annual Agency Burden and Cost - NESHAP for Mercury Cell Chlor-Alkali Plants (40 CFR part 63, subpart IIIII) (Renewal).

### **6(e) Bottom Line Burden Hours 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 costs are \$1,417,912. Details regarding these estimates may be found below in Table 1. Furthermore, the annual public reporting and recordkeeping burden for this collection of information is estimated to average 809 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are \$74,000 (rounded). 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 234 labor hours at a cost of \$10,937. See below Table 2: Annual Agency Burden and Cost - NESHAP for Mercury Cell Chlor-Alkali Plants (40 CFR part 63, subpart IIII) (Renewal).

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

There was a slight decrease in labor hours from the previous ICR due to the adjustment of number of responses associated with the recordkeeping for mass of virgin mercury added to cells.

There is no change in the number of respondents or in the capital, start-up and operation and maintenance costs in this ICR compared to the previous ICR. This is due to two considerations. Firstly, the regulations have not changed over the past three years. There is currently a revised NESHAP for Mercury Cell Chlor-Alkali Plants under development, but that rule is not yet finalized. Secondly, the growth rate for the industry is non-existent, so there is no significant change in the overall burden, because no new sources are expected in the next three years. However, it should be noted that labor rates have increased over the past three years which increases the labor hour dollar-cost.

The decrease in Agency burden resulted from an adjustment to the number of initial compliance status and performance test reports requiring review. Since these reports are only one-time burdens, and there are no new sources anticipated in the next three years, the only Agency activity associated with this ICR is to review the semi-annual compliance reports. The burden hours and dollars associated with reviewing the one-time activities were removed from the Agency burden.

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

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 809 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-2009-0427. 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) 566-1752. 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-2009-0427 and OMB Control Number 2060-0542 in any correspondence.

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

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

