**SUPPORTING STATEMENT**

**ENVIRONMENTAL PROTECTION AGENCY**

**NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill (40 CFR Part 63, Subpart MM) (Renewal)**

**1. Identification of the Information Collection**

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

NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill (40 CFR Part 63, Subpart MM) (Renewal), EPA ICR Number 1805.10, OMB Control Number 2060-0377.

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

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills were proposed on April 15, 1998, promulgated on January 12, 2001, amended on April 20, 2006, and more recently-amended on October 11, 2017 (82 *FR* 47328) as a result of the residual risk and technology review (RTR) required under the Clean Air Act (CAA). The October 11, 2017 amendments eliminated the startup, shutdown, and malfunction (SSM) exemption; removed the SSM plan requirement; added periodic emissions testing; revised the opacity monitoring allowances; added a requirement to maintain proper operation of the electrostatic precipitator (ESP) automatic voltage control (AVC) for recovery furnaces and lime kilns equipped with ESPs; added electronic submittal of selected notifications and reports; decreased the frequency of excess emissions reporting from quarterly to semiannually; and made technical and editorial changes. These regulations apply to new and existing chemical recovery combustion sources at kraft, soda, sulfite, and stand-alone semichemical pulp mills, for which the chemical recovery combustion sources emit greater than or equal to 10 tons per year (tpy) of any one hazardous air pollutant (HAP) or greater than or equal to 25 tpy of any combination of HAPs. New affected facilities include those that commenced construction or reconstruction after the April 15, 1998 proposal. This information is being collected to assure compliance with 40 CFR Part 63, Subpart MM.

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 any failures to meet applicable standards, 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 40 CFR Part 63 shall maintain a file containing these documents and retain the file for at least five years following the date of such reports and records. All reports are sent to the delegated state or local authority. If there is no such delegated authority, the reports are sent directly to the U.S. Environmental Protection Agency (EPA)’s regional office.

The “Affected Public” includes owners and operators of affected facilities at kraft, soda, sulfite, and stand-alone semichemical pulp mills. The “burden” to the Affected Public may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (40 CFR Part 63, Subpart MM) (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 Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (40 CFR Part 63, Subpart MM) (Renewal). All the chemical recovery combustion sources at kraft, soda, sulfite, and stand-alone semichemical pulp mills facilities in the United States are owned and operated by the kraft, soda, sulfite, and stand-alone semichemical pulp mills industry. None of the facilities in the United States are owned by either state, local, tribal or the Federal government. They are privately-owned, for-profit businesses.

Over the next three years, approximately 107 existing respondents per year will be subject to these standards. In addition, one existing respondent on average per year is expected to construct new process units that will be subject to this NESHAP over the 3-year period of this ICR, and one new major source facility is expected to be built in the third year of this ICR. Mills can have more than one affected facility onsite (e.g., recovery furnace, smelt dissolving tanks, lime kiln). Based on current industry trends, any new furnace is expected to be a non-direct contact evaporator (NDCE) recovery furnace equipped with a dry ESP system. The respondent universe and growth rate are based on research conducted by the EPA for the October 11, 2017 rule amendments, an information collection request (ICR) conducted by EPA’s Office of Air Quality Planning and Standards (OAQPS) in 2011, and consultation with the industry as discussed in section 3(c).

This ICR is a new information collection.

**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, HAP emissions, including acetaldehyde, benzene, formaldehyde, methanol, methyl isobutyl ketone, phenol, styrene, toluene, and xylenes, from chemical recovery combustion sources at kraft, soda, sulfite, and stand-alone semichemical pulp mills either cause or contribute to air pollution that may reasonably be anticipated to endanger public health and/or welfare. Therefore, the NESHAP standards were promulgated for this source category at 40 CFR Part 63,Subpart MM.

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

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

Performance tests are required in order to determine an affected facility’s initial and ongoing capability to comply with the emission standard. During performance tests a record of the operating parameters under which compliance was achieved is recorded and used on a continuous basis to determine compliance.

The notifications required in these standards 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 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 MM.

**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* (82 *FR* 29552) on June 29, 2017. No comments were received on the burden published in the *Federal Register* for this renewal.

**3(c) Consultations**

The Agency has consulted industry experts and internal data sources to project the number of affected facilities and industry growth over the next three years. The primary source of information as reported by industry, in compliance with the recordkeeping and reporting provisions in the standard, is the Integrated Compliance Information System (ICIS). ICIS is EPA’s database for the collection, maintenance, and retrieval of compliance data for industrial and government-owned facilities. In addition, the EPA conducted an ICR in 2011 to gather data from the industry to update the burden estimates. The growth rate for the industry is based on our consultations with the Agency’s internal industry experts. Approximately 107 respondents will be subject to these standards over the three-year period covered by this ICR.

Industry trade association(s) and other interested parties were provided an opportunity to comment on the burden associated with these standards as they were being developed and these same standards have been reviewed previously to determine the minimum information needed for compliance purposes. In developing this ICR, we contacted both the American Forest and Paper Association (AF&PA), at 202-463-2700, and the National Council for Air and Stream Improvement (NCASI), at 919-941-6400. Comments from the AF&PA indicated that a dissolving pulp mill is estimated to startup operation in Arkansas in 2020 or 2021. This new facility is in addition to the one new respondent per year that is an existing facility constructing new process units.

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

**3(e) General Guidelines**

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

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 these same standards. The 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 the EPA to establish the compliance history of a source, any pattern of non-compliance and to determine the appropriate level of enforcement action. The EPA has found that the most flagrant violators have violations extending beyond five years. In addition, the 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 Codes**

The respondents to the recordkeeping and reporting requirements are owners or operators of chemical recovery combustion sources at kraft, soda, sulfite, and stand-alone semichemical pulp mills. The United States Standard Industrial Classification (SIC) codes for the respondents affected by the standards and the corresponding North American Industry Classification System (NAICS) codes are listed in the table below:

|  |  |  |
| --- | --- | --- |
| **Standard (40 CFR Part 63, Subpart MM)** | **SIC Codes** | **NAICS Codes** |
| Pulp Mills | 2611 | 32211 |
| Paper Mills | 2621 | 32212 |
| Paperboard Mills | 2631 | 32213 |

**4(b) Information Requested**

**(i) Data Items**

In this ICR, all the data that are recorded or reported is required by the NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (40 CFR Part 63, Subpart MM).

A source must make the following notifications and reports:

| **Notifications** | |
| --- | --- |
| **Requirement** | **Regulation Reference**  **(40 CFR Part 63)** |
| Construction/reconstruction | § 63.5(d) |
| Actual startup | § 63.9(b)(4)(v) |
| Applicability of standard | § 63.9(b)(2) |
| Performance test | §§ 63.7(b), 63.9(e) |
| Performance evaluation | § 63.9(g) |
| Compliance status | §§ 63.9(h), 63.867(b)(1)-(2) |

|  |  |
| --- | --- |
| **Reports** | |
| Results of performance test | § 63.10(d)(2) |
| Results of performance evaluation | § 63.10(e)(2) |
| Semiannual excess emission reports and summary reports | §§ 63.10(e)(3)(v), 63.867(c) |

A source must keep the following records:

| **Recordkeeping** | |
| --- | --- |
| **Requirement** | **Regulation Reference**  **(40 CFR Part 63)** |
| 5 years retention of records | § 63.10(b)(1) |
| Records of performance tests | § 63.10(b)(2)(viii) |
| Documentation supporting initial notifications and notification of compliance status | § 63.10(b)(2)(xiv) |
| Exceedances under section 63.864(k) requiring corrective action and violations | § 63.866(b) |
| Black liquor solids firing rates for all recovery furnaces and semichemical combustion units | § 63.866(c)(1) |
| Lime production rates for all lime kilns | § 63.866(c)(2) |
| All parameter monitoring data required in section 63.864 | § 63.866(c)(3) |
| Supporting calculations for compliance determinations made under section 63.865(a) through (d) | § 63.866(c)(4) |
| Compliant parameter operating limits established for each affected source or process unit | § 63.866(c)(5) |
| Certification that an NDCE recovery furnace equipped with a dry ESP system is used to comply with the gaseous organic HAP standard in section 63.862(c)(1) | § 63.866(c)(6) |
| Bag leak detection system alarms and corrective actions | § 63.866(c)(7) |
| Compliance with requirement to maintain proper operation of ESP’s AVC | § 63.866(c)(8) |
| Number, timing, and duration of failures to meet applicable standards | § 63.866(d)(1) |
| For each failure, a list of affected sources or equipment, noncompliant emissions estimates, and method used to estimate emissions | § 63.866(d)(2) |
| Actions taken to minimize emissions and corrective actions taken to return affected unit to normal operation | § 63.866(d)(3) |

Electronic Reporting

Currently, affected facilities are using monitoring equipment that provides automated parameter data (e.g., continuous opacity or control device parameter monitoring). Although personnel at the facilities still need to evaluate the data, this type of monitoring equipment has significantly reduced the burden associated with monitoring and recordkeeping. Modern pulp and paper facilities employ distributive controls on their manufacturing process and have integrated many of the compliance recordkeeping and reporting requirements into their systems. In addition, some regulatory agencies are setting up electronic reporting systems to allow sources to report electronically, which is reducing the reporting burden. The October 11, 2017 amendments to the NESHAP added a requirement that respondents submit performance test results to the EPA through the EPA’s Compliance and Emissions Data Reporting Interface (CEDRI). The performance test data must be submitted in a file format generated through the use of the EPA’s ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA’s ERT Web site. Respondents are also required to submit selected notifications and semiannual reports through the EPA’s CEDRI.

**(ii) Respondent Activities**

| **Respondent Activities** |
| --- |
| Familiarization with the regulatory requirements. |
| Install, calibrate, maintain, and operate CMS for opacity and automatic voltage control, pressure drop, liquid flow rate, or fan amperage for each ESP and wet scrubber, temperature for each RTO, or leak detection for fabric filter systems. |
| Perform initial and periodic performance tests using EPA Reference Methods 1, 1A, 2, 2A, 2C, 2D, 2F, 2G, 3, 3A, 3B, 4, 5, 17, 25A, 29, or 308, and repeat performance tests if necessary. |
| Write the notifications and reports listed above. |
| Enter information required to be recorded above. |
| Submit the required notifications and reports. |
| 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. |
| Adjust existing data acquisition and reporting systems to comply with October 11, 2017 RTR amendments to the NESHAP. |

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

**5(a) Agency Activities**

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

| **Agency Activities** |
| --- |
| Observe initial and periodic performance tests and retests. |
| 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 Enforcement and Compliance History Online (ECHO) and ICIS. |

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

Following notification of startup, the reviewing authority could inspect the source to determine whether the pollution control devices are properly installed and operated. Performance test reports are used by the Agency to discern a source’s initial capability to comply with the emission standards. 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. The EPA uses ICIS for tracking air pollution compliance and enforcement by local and state regulatory agencies, EPA regional offices and EPA headquarters. The EPA and its delegated Authorities can edit, store, retrieve and analyze this data.

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

**5(c) Small Entity Flexibility**

Most 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. Three small entities are anticipated to be minimally affected by the RTR amendments. 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 Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (40 CFR Part 63, Subpart MM) (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 neither conduct nor sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB Control Number.

**6(a) Estimating Respondent Burden**

The average annual burden to industry over the next three years from these recordkeeping and reporting requirements is estimated to be 122,000 hours (Total Labor Hours from Table 1 below). These hours are based on Agency studies and background documents from the development of the regulation, the EPA’s recent reevaluation of the source category inventory, 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 $147.40 ($70.19 + 110%)

Technical $117.92 ($56.15 + 110%)

Clerical $57.02 ($27.15 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, June 2018, “Table 2. Civilian Workers, by occupational and industry group.” The rates are from column 1, “Total compensation.” These 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 standards are both labor costs which are addressed elsewhere in this ICR and the costs associated with continuous monitoring, performance testing, and other compliance activities. The capital/startup costs are one-time costs when a facility becomes subject to the regulation and include startup cost for continuous monitoring systems (CMS) and the purchase of stack testing services. The annual operation and maintenance costs are the ongoing costs to maintain the monitors.

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Capital/Startup vs. Operation and Maintenance Costs** | | | | | | |
| (A)  Cost Item | (B)  Annualized Capital/Startup Cost for One Respondent | (C)  Number of 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) |
| Continuous Monitoring Device: a | | | | | | |
| Continuous opacity monitoring system (COMS) | $41,000 | 0 | 0 | $8,000 | 0 | $0 |
| Continuous parameter monitoring system (CPMS) | $0 | 0 | 0 | $0 | 0 | $0 |
| Performance tests: b | | | | | | |
| Method 5 for PM | $2,439 | 263 | $641,433 | $0 | 0 | $0 |
| Method 25A for THC | $3,414 | 7 | $23,901 | $0 | 0 | $0 |
| Method 308 for methanol | $3,414 | 8 | $27,316 | $0 | 0 | $0 |
| Retests c | -- | -- | $138,530 | -- | -- | -- |
| **Total** |  |  | **$831,000** |  |  | **$0** |

a We estimate that O&M costs for COMS and CPMS for new and existing units are already accounted for in the capital/startup and O&M costs of COMS and CPMS required for compliance with the New Source Performance Standards (NSPS) for Kraft Pulp Mills (40 CFR part 60, Subpart BB).

b Capital costs for performance tests were $10,000 (Method 5) and $14,000 (Method 25A and Method 308). Annualized capital costs were estimated assuming a 5-year payment period at 7% interest for initial performance tests (with a capital recovery factor of 0.244).

c We estimate that 20% of respondents will repeat the performance test due to failure. Estimate assumes 107 existing facilities with 263 sources, 1 new facility with 2 recovery furnaces, and 6 new sources at 3 existing facilities, 5 of which require THC testing.

The total capital/startup costs for this ICR are $831,000. This is the total of column D in the above table.

The total operation and maintenance (O&M) costs for this ICR are $0. This is the total of column G.

The average annual capital/startup and operation and maintenance costs to industry over the next three years of the ICR is estimated to be $831,000. These are the recordkeeping costs.

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

The only costs to the Agency are those costs associated with observation of performance tests and analysis of reported information. EPA's overall compliance and enforcement program includes such activities 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 $44,000.

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

Managerial $65.71 (GS-13, Step 5, $41.07 + 60%)

Technical $48.75 (GS-12, Step 1, $30.47 + 60%)

Clerical $26.38 (GS-6, Step 3, $16.49 + 60%)

These rates are from the Office of Personnel Management (OPM), 2018 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 Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (40 CFR Part 63, Subpart MM) (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 107 existing respondents will be subject to these standards. It is estimated that one existing mill per year (for a total of three existing mills) will have new process units that will become subject to these regulations in the next 3 years, and one new mill will start up in the third year of this information collection. The overall average number of respondents, as shown in the table below, is 107 per year.

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

| **Number of Respondents** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  | **Respondents That Submit Reports** | | **Respondents That Do Not Submit Any Reports** |  | |
| **Year** | **(A)**  **Number of New Respondents a** | **(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 | 1 | 107 | 0 | 1 | 107 |
| 2 | 1 | 107 | 0 | 1 | 107 |
| 3 | 2 | 107 | 0 | 1 | 108 |
| **Average** | **1.33** | **107** | **0** | **1** | **107.33** |

a New respondents include sources with constructed and reconstructed 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 107.

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

| **Total Annual Responses** | | | | |
| --- | --- | --- | --- | --- |
| (A)  Information Collection Activity | (B)  Number of Respondents | (C)  Number of Responses | (D)  Number of Existing Respondents That Keep Records But Do Not Submit Reports | (E)  Total Annual Responses  E=(BxC)+D |
| Notification of construction/ reconstruction | 1.33 | 1 | 0 | 1.33 |
| Notification of actual startup | 1.33 | 1 | 0 | 1.33 |
| Notification of applicability of standard | 1.33 | 1 | 0 | 1.33 |
| Notification of performance test/ retest | 43 | 1 | 0 | 43 |
| Notification of performance evaluation | 43 | 1 | 0 | 43 |
| Notification of compliance status | 1.33 | 1 | 0 | 1.33 |
| Report of performance test/retest | 43 | 1 | 0 | 43 |
| Semiannual report of monitoring exceedances and periods of noncompliance | 5 | 2 | 0 | 10 |
| Semiannual report of no exceedances | 102 | 2 | 0 | 204 |
|  |  |  | **Total** | **348** |

The number of Total Annual Responses is 348.

The total annual labor costs are $13,900,000. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (40 CFR Part 63, Subpart MM) (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 below in Tables 1 and 2, respectively, and summarized below as well.

**(i) Respondent Tally**

The total annual labor hours are 122,000 hours. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (40 CFR Part 63, Subpart MM) (Renewal).

Furthermore, the annual public reporting and recordkeeping burden for this collection of information is estimated to average 350 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are $831,000. The cost calculations are detailed in Section 6(b)(iii), Capital/Startup vs. Operation and Maintenance (O&M) Costs.

**(ii) The Agency Tally**

The average annual Agency burden and cost over next three years is estimated to be 893 labor hours at a cost of $44,400; see below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (40 CFR Part 63, Subpart MM) (Renewal).

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

This ICR includes a more accurate estimate of the number of new respondents based on EPA’s recent consultations with industry trade groups, which indicated that one new facility will start up in the third year of this information collection, in addition to the one new respondent per year that is an existing facility constructing new process units. This ICR also updates the burden associated with the October 11, 2017 RTR amendments, including removing first-year costs associated with the amendments, and accounting for the remaining one-time burden for facilities that applies through October 2020.

**6(g) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 350 hours per response. “Burden” means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

An agency may neither conduct nor sponsor, and a person is not required to respond to, a collection of information unless it displays a valid OMB Control Number. The OMB Control Numbers for EPA regulations are listed at 40 CFR Part 9 and 48 CFR Chapter 15.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, the EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OECA-2014-0061. 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), WJC West, Room 3334, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the docket center is (202) 566-1752. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW, Washington, DC 20503, Attention: Desk Officer for EPA. Please include the EPA Docket ID Number EPA-HQ-OECA-2014-0061 and OMB Control Number 2060-0511 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 Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (40 CFR Part 63, Subpart MM) (Renewal)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Burden item** | **(A)  Person hours per occurrence** | **(B)  No. of occurrences per respondent per year** | **(C)  Person hours per respondent per year (C=AxB)** | **(D)  Respondents per year a** | **(E)  Technical person hr/yr (E=CxD)** | **(F) Management person hr/yr (Ex0.05)** | **(G)  Clerical person hr/yr  (Ex0.1)** | **(H)  Total Cost Per year b** |
| 1. Applications | N/A |  |  |  |  |  |  |  |
| 2. Surveys and studies | N/A |  |  |  |  |  |  |  |
| 3. Reporting requirements |  |  |  |  |  |  |  |  |
| A. Familiarization with the regulatory requirements c | 1 | 1 | 1 | 107 | 107 | 5.35 | 10.7 | $14,015.55 |
| B. Required activities d |  |  |  |  |  |  |  |  |
| Prepare for initial/periodic performance test | 24 | 1 | 24 | 25 | 600 | 30 | 60 | $71,559 |
| Attend initial/periodic performance test | 24 | 2 | 48 | 25 | 1,200 | 60 | 120 | $157,183.74 |
| Prepare for retest | 24 | 1 | 24 | 5 | 120 | 6 | 12 | $15,718.37 |
| Attend retest | 24 | 2 | 48 | 5 | 240 | 12 | 24 | $31,436.75 |
| C. Create information | See 3B |  |  |  |  |  |  |  |
| D. Gather existing information | See 3B |  |  |  |  |  |  |  |
| E. Write reports |  |  |  |  |  |  |  |  |
| Notifications e, f, g |  |  |  |  |  |  |  |  |
| Notification of construction/reconstruction | 2 | 1 | 2 | 1.33 | 3 | 0.13 | 0.27 | $349.30 |
| Notification of actual startup | 2 | 1 | 2 | 1.33 | 3 | 0.13 | 0.27 | $349.30 |
| Notification of applicability of standard | 2 | 1 | 2 | 1.33 | 3 | 0.13 | 0.27 | $349.30 |
| Notification of compliance status | 80 | 1 | 80 | 1.33 | 107 | 5.33 | 10.67 | $13,971.89 |
| Notification of performance test/retest | 2 | 1 | 2 | 43 | 86 | 4.3 | 8.6 | $11,264.83 |
| Notification of performance evaluation | 2 | 1 | 2 | 43 | 86 | 4.3 | 8.6 | $11,264.83 |
| Report of performance test/retest (through CEDRI using ERT) h | 8 | 1 | 8 | 43 | 344 | 17.2 | 34.4 | $45,059.34 |
| Excess emissions report (through CEDRI) i |  |  |  |  |  |  |  |  |
| Semiannual reports of monitoring exceedances and periods of noncompliance | 16 | 2 | 32 | 5 | 160 | 8 | 16 | $20,957.83 |
| Semiannual reports of no exceedances | 8 | 2 | 16 | 102 | 1,632 | 81.6 | 163.2 | $213,769.89 |
| ***Subtotal for Reporting Requirements*** |  |  |  |  | **5,393** | | | **$607,250** |
| 4. Recordkeeping requirements |  |  |  |  |  |  |  |  |
| A. Read instructions | See 3A |  |  |  |  |  |  |  |
| B. Plan activities | See 3B |  |  |  |  |  |  |  |
| C. Implement activities | See 3B |  |  |  |  |  |  |  |
| D. Develop record system j | 40 | 1 | 40 | 1.33 | 53 | 2 | 5.33 | $6,887.68 |
| E. Time to enter information |  |  |  |  |  |  |  |  |
| Records and documentation of supporting calculations for compliance determinations k | 8 | 1 | 8 | 43 | 344 | 17 | 34.4 | $45,029.86 |
| Record of compliant monitoring parameter ranges | 2 | 1 | 2 | 43 | 86 | 4.3 | 8.6 | $11,264.83 |
| Records certifying that an NDCE recovery furnace equipped with a dry ESP system is used to comply with the gaseous organic HAP standard for kraft and soda recovery furnaces l | 2 | 1 | 2 | 1 | 2.0 | 0.07 | 0.2 | $257.55 |
| Records demonstrating compliance with requirement to maintain proper operation of ESP’s AVC m | 8 | 2 | 16 | 183.67 | 2,939 | 146 | 293.872 | $384,794.53 |
| Records of failures to meet standards n | 2 | 12 | 24 | 5 | 120 | 6 | 12 | $15,718.37 |
| Records of black liquor solids firing rates for recovery furnaces and semichemical combustion units o | 1.5 | 52 | 78 | 104 | 8,112 | 406 | 811.2 | $1,062,621.04 |
| Records of lime production for lime kilns p | 1.5 | 52 | 78 | 98 | 7,644 | 382 | 764.4 | $1,001,230.94 |
| Records of CMS data q | 0.5 | 1,050 | 525 | 107.33 | 56,350 | 2,809 | 5635 | $7,379,833.57 |
| F. Time to train personnel |  |  |  |  |  |  |  |  |
| Initial training r | 40 | 1 | 40 | 1.33 | 53 | 2 | 5.33 | $6,887.68 |
| Refresher training s | 16 | 1 | 16 | 107 | 1,712 | 86 | 171.2 | $224,307.76 |
| G. Time to adjust existing ways to comply with previously applicable requirements t | 17.8 | 1 | 17.8 | 107 | 1,905 | 144 | 190.46 | $256,665.44 |
| H. Time to transmit or disclose information |  |  |  |  |  |  |  |  |
| Compile data for semiannual periods u | 96 | 2 | 192 | 107.33 | 20,608 | 1,027 | 2060.8 | $2,698,867.61 |
| Enter/verify information for semiannual reports v | 8 | 2 | 16 | 107.33 | 1,717 | 86 | 171.73 | $224,967.05 |
| I. Time for audits | N/A |  |  |  |  |  |  |  |
| ***Subtotal for Recordkeeping Requirements*** |  |  |  |  | **116,927** | | | **$13,319,334** |
| **TOTAL LABOR BURDEN AND COSTS (rounded) w** |  |  |  |  | **122,000** | | | **$13,900,000** |
| **TOTAL CAPITAL AND O&M COST (rounded) w** |  |  |  |  |  |  |  | **$831,000** |
| **GRAND TOTAL (rounded) w** |  |  |  |  |  |  |  | **$14,700,000** |
| a We estimate that the number of existing sources subject to the rule is 107 pulp mills. We estimate 1 new pulp mill will begin operation in 2021. We also estimate that new equipment will be installed at three existing pulp mills and become subject to the rule over the 3 years of this ICR (two new recovery furnaces, two new SDTs, and one new lime kiln). Based on these estimates, over the 3 years of this ICR, there will be an average of 107.33 pulp mills per year (107 existing facilities + 1 new facility in the third year/3 years = 107.33) and new source requirements for an average of 1.33 pulp mills per year (1 modified or reconstructed facility per year + 1 new facility in the third year/3 years = 1.33 facilities). | | | | | | | | |
| b This ICR uses the following labor rates: $147.40 per hour for Managerial labor; $117.92 per hour for Technical labor, and $57.02 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, December 2018, Table 2. Civilian Workers, by Occupational and Industry groups. 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. | | | | | | | | |
| c We have assumed that it will take 1 hour each year for existing respondents to refamiliarize themselves with rule requirements. | | | | | |  |  |  |
| d We estimate that it will take the respondent 24 hours to prepare for initial/periodic performance test (e.g., prepare test plan) and 24 hours to attend the test. We also estimate 2 plant personnel will attend the test. We estimate that 74 mills (which includes the 1 new mill) will need to conduct a test (the rest of the 107 existing mills are already required under existing state rules to conduct tests); this will occur once during the 3-year ICR period (74 respondents/3 years = 25). In addition, we estimate that 20% of respondents (20% x 25 respondents = 5) will repeat performance test due to failure. | | | | | | | | |
| e With the exception of the notification of compliance status, we estimate that it will take the respondent 2 hours once per year to complete the notifications and submit selected ones through the EPA's CEDRI. | | | | | | | | |
| f We estimate that it will take the respondent 80 hours once in the initial year to prepare the notification of compliance status and submit it through the EPA's CEDRI. | | | | | | | |  |
| g We estimate that the 1 new pulp mill and 3 existing pulp mills with new process units will submit initial notifications (construction/reconstruction, actual startup, applicability of standard) and a notification of compliance status, which are one-time requirements (4 new respondents/3 years = 1.33). We estimate that 43 mills will submit notifications of performance test/retest and performance evaluation over the 3-year ICR period (testing = (1 new + 107 existing respondents)/3 years = 36; retesting = 20% x 36 respondents = 7; total testing and retesting = 36 + 7 = 43). | | | | | | | | |
| h Hard copy report of performance test/retest is included in capital/startup costs. Submittal of performance test/retest data through the EPA's CEDRI in ERT format is estimated to require 8 hours for 43 mills (see respondent calculation in footnote g). | | | | | | | | |
| i We estimate that 5% of respondents (5% x 107.33 respondents = 5) will each take 16 hours two times per year to complete reports of monitoring exceedances and periods of noncompliance and submit them through the EPA's CEDRI. We estimate that 95% of respondents (95% x 107.33 respondents = 102) will each take 8 hours two times per year to write reports of no exceedances and submit them through the EPA's CEDRI. | | | | | | | | |
| j We estimate that it will take the respondent 40 hours to develop a record system to comply with monitoring requirements (4 new respondents/3 years = 1.33). | | | | | | | |  |
| k We estimate that it will take the respondent 8 hours (1 day) each year to enter records and documentation of supporting calculation for compliance determinations and 2 hours to enter a record of compliant monitoring parameter ranges. We estimate that 43 mills (see footnote g) will enter this information (includes initial test and retest, for mills required to retest). | | | | | | | | |
| l We estimate that the 1 new pulp mill and 2 existing mills will install new recovery furnaces over 3 years, for an average of 1 mill with new recovery furnaces per year over the ICR period (3 mills/3 years=1). Based on current industry trends, the new furnaces are expected to be a non-direct contact evaporator (NDCE) recovery furnace equipped with a dry ESP system. We estimate that it will take the respondent 2 hours to record this information. | | | | | | | | |
| m Assume the 1 new facility has two recovery furnaces with 1 ESP for each recovery furnace. We estimate that it will take 8 hours per semiannual period each year to keep records demonstrating compliance with the requirement to maintain proper operation of the ESP AVC for 183.67 recovery furnace and lime kiln ESPs (183 existing ESPs + 2 new ESPs in the third year/3 years = 183.67). | | | | | | | | |
| n We estimate that 5% of respondents (5% x 107.33 respondents = 5) will fail to meet standards each year. We estimate that each respondent will take 2 hours 12 times per year to keep records of failures to meet the standards. | | | | | | | | |
| o We estimate 104 existing kraft, soda, and stand-alone semichemical pulp mills have recovery furnaces or other chemical recovery combustion units that will need to keep records of black liquor solids firing rate. We estimate that each respondent will take 1.5 hours 52 times per year to keep these records. | | | | | | | | |
| p We estimate 98 existing kraft and soda pulp mills have lime kilns that will need to keep records of lime production rate. We estimate that each respondent will take 1.5 hours 52 times per year to keep these records. | | | | | | | | |
| q For the 1 new facility, assume each of the 2 NDCE recovery furnaces has a smelt dissolving tank (SDT) with a wet scrubber. We estimate that each respondent will take 0.5 hours 1,050 times per year to record wet scrubber and regenerative thermal oxidizer (RTO) parameters at all existing 107.33 mills (107 existing sources + 1 new source in third year/3 years=107.33). | | | | | | | | |
| r We estimate that it will take the respondent 40 hours (1 week) once per year for initial training of personnel with new sources (4 new respondents/3 years) = 1.33). | | | | | | | |  |
| s We estimate that it will take each respondent 16 hours to provide refresher training each year for personnel at all 107 existing mills. | | | | | | |  |  |
| t Over the period October 11, 2017 through October 11, 2020, due to the RTR amendments published on October 11, 2017, we estimated that it would take each respondent 80 hours to make a one-time adjustment to existing data acquisition systems to include startup and shutdown periods and the revised opacity monitoring allowances, and to transition to electronic excess emissions reporting. This ICR includes the burden for the period November 1, 2018 through October 31, 2020, which equates to 2/3 of the original 80-hour estimate, or 53.3 hours. Averaged over the 3 years of this ICR, this burden equates to 17.8 hours per year for 107 respondents. | | | | | | | | |
| u We estimate that each respondent will take 96 hours per semiannual period to compile data for all 107.33 mills (107 existing sources + 1 new sources in third year/3 years=107.33). | | | | | | | | |
| v We estimate that each respondent will take 8 hours two times per year to verify information for reports for all 107.33 mills (107 existing sources + 1 new sources in third year/3 years=107.33). | | | | | | | | |
| w Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding. | | | |  |  |  |  |  |

**Table 2: Average Annual EPA Burden and Cost – NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (40 CFR Part 63, Subpart MM) (Renewal)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Activity** | **(A)  EPA person- hours per occurrence** | **(B)  No. of occurrences per plant per year** | **(C)  EPA person- hours per plant per year (C=AxB)** | **(D)  Plants per year a** | **(E)  Technical person hr/yr (E=CxD)** | **(F)  Management person hr/yr (Ex0.05)** | **(G)  Clerical person hr/yr (Ex0.1)** | **(H)  Cost, $ b** |
| 1. Attend initial/periodic performance test c | 24 | 1 | 24 | 3.6 | 86.4 | 4.32 | 8.64 | $4,724.01 |
| 2. Attend retest c,d | 24 | 1 | 24 | 0.7 | 16.8 | 0.84 | 1.68 | $918.56 |
| 3. Report review |  |  |  |  |  |  |  |  |
| Notification of construction/reconstruction e | 2 | 1 | 2 | 1.33 | 2.67 | 0.13 | 0.27 | $145.80 |
| Notification of actual startup e | 2 | 1 | 2 | 1.33 | 2.67 | 0.13 | 0.27 | $145.80 |
| Notification of applicability of standard e | 2 | 1 | 2 | 1.33 | 2.67 | 0.13 | 0.27 | $145.80 |
| Notification of initial/periodic performance test f | 2 | 1 | 2 | 43 | 86 | 4.3 | 8.6 | $4,702.14 |
| Notification of performance evaluation f | 2 | 1 | 2 | 43 | 86 | 4.3 | 8.6 | $4,702.14 |
| Review of notification of compliance status e | 4 | 1 | 4 | 1.33 | 5.33 | 0.27 | 0.53 | $291.61 |
| Review of excess emissions report |  |  |  |  |  |  |  |  |
| Semiannual reports of monitoring exceedances and periods of noncompliance g | 8 | 2 | 16 | 5 | 80 | 4 | 8 | $4,374.08 |
| Semiannual reports of no exceedances h | 2 | 2 | 4 | 102 | 408 | 20.4 | 40.8 | $22,307.81 |
| ***Subtotal for Burden and Cost - Salary*** |  |  |  |  | **893** | | | **$42,458** |
| Travel Expenses for Tests Attended i |  |  |  |  |  |  |  | **$1,935** |
| **TOTAL ANNUAL BURDEN AND COST j** |  |  |  |  |  |  |  | **$44,400** |
| a We estimate that the number of existing sources subject to the rule is 107 pulp mills. We estimate 1 new pulp mill will begin operation in 2021. We also estimate that new equipment will be installed at three existing pulp mills and become subject to the rule over the 3 years of this ICR (two new recovery furnaces, two new SDTs, and one new lime kiln). Based on these estimates, over the 3 years of this ICR, there will be an average of 107.33 pulp mills per year (107 existing facilities + 1 new facility in the third year/3 years = 107.33) and new source requirements for an average of 1.33 pulp mills per year (1 modified or reconstructed facility per year + 1 new facility in the third year/3 years = 1.33 facilities). | | | | | | | | |
| b This cost is based on the following labor rates which incorporate a 1.6 benefits multiplication factor to account for government overhead expenses: $65.71 Managerial rate (GS-13, Step 5,$41.07 x 1.6), $48.75 Technical rate (GS-12, Step 1, $30.47 x 1.6), and $26.38 Clerical rate (GS-6, Step 3, $16.49 x 1.6). These rates are from the Office of Personnel Management (OPM) 2018 General Schedule which excludes locality rates of pay. | | | | | | | | |
| c  Assume EPA will attend tests at 3.6 plants per year. We estimate that it will take EPA personnel 24 hours once per year to attend initial and periodic performance tests at 10% of plants (0.10 x 108/3 years = 3.6), assuming 107 existing plant and 1 new plant will test. | | | | | | | | |
| d Assume EPA will attend retests at 0.7 plants per year. We estimate that 20% of respondents will repeat performance test due to failure and that EPA personnel will attend 10% of retests (0.20 x 0.10 x 108/3 years = 0.7), assuming 107 existing plant and 1 new plant will test. | | | | | | | | |
| e We estimate that it will take EPA personnel 2 hours once per year to complete review of the initial notifications (construction/reconstruction, actual startup, applicability of standard) and 4 hours once per year to review the notification of compliance status for new process units (4 mills with new process units/3 years = 1.33). | | | | | | | | |
| f We estimate that it will take EPA personnel 2 hours once per year to complete review of the initial and periodic notifications of performance test/retest and performance evaluation. We estimate that 43 mills will submit notifications of initial/periodic performance test/retest and performance evaluation over the 3-year ICR period (test: (1 new + 107 existing respondents)/3 years = 36; retest: 20% x 36 = 7; total: 36 + 7 = 43). | | | | | | | | |
| g We estimate that it will take EPA personnel 8 hours two times per year to review the monitoring exceedances and periods of noncompliance in the excess emissions report for 5% of respondents (5% x 107.33 = 5). | | | | | | | | |
| h We estimate that it will take EPA personnel 2 hours two times per year to review the no exceedances report for 95% of respondents (95% x 107.33 = 102). | | | | | | | | |
| i We estimate that it will take EPA personnel 1 day per plant plus time for travel, at $50 per diem per day, and $400 transportation expense per round trip. Assuming an average of 4.3 tests/retests each year (3.6 tests + 0.7 retests = 4.3)(see footnotes c and d), the annual cost for travel expenses is $1,935 (4.3 tests/retests\*($400+$50) = $1,935). | | | | | | | | |
| j Sum of salary and expenses. Total has been rounded to 3 significant figures. Figure may not add exactly due to rounding. | | | | | | | | |