

**SUPPORTING STATEMENT
ENVIRONMENTAL PROTECTION AGENCY**

**NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-
Alone Semichemical Pulp Mills (40 CFR Part 63, Subpart MM) (Amendments)
November 2016**

Part A of the Supporting Statement

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 Mills (40 CFR Part 63, Subpart MM) (Amendments),” EPA ICR Number 1805.08, 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 was proposed on April 15, 1998, promulgated on January 12, 2001, and most recently amended on April 20, 2006. The NESHAP is codified at 40 CFR Part 63, Subpart MM. Amendments to the NESHAP are being proposed as a result of the residual risk and technology review (RTR) required under the Clean Air Act (CAA) (as discussed further below). The NESHAP applies to kraft, soda, sulfite, and stand-alone semichemical pulp mills that have chemical recovery combustion sources and that 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. Affected sources include recovery furnaces, smelt dissolving tanks (SDTs), and lime kilns at kraft and soda pulp mills and chemical recovery combustion units at sulfite and stand-alone semichemical pulp mills. The pollutants regulated include HAP metals, using particulate matter (PM) as a surrogate, and gaseous organic HAP, using methanol or total hydrocarbon (THC) as a surrogate, depending on the affected source. New facilities include those that commenced construction or reconstruction after the date of the original proposal (April 15, 1998). This information is being collected to assure compliance with 40 CFR Part 63, Subpart MM.

In general, all NESHAP require initial notifications, performance tests, and periodic reports by the owners/operators of the affected facilities. Owners/operators are also required to maintain records of the occurrence and duration 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 sources subject to NESHAP. A semiannual report is also required.

Any owner or operator subject to the provisions of this part shall maintain a file of these measurements, and retain the file for at least 5 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.

The proposed amendments to the rule eliminate the startup, shutdown, and malfunction (SSM) exemption; remove the SSM plan requirement; add periodic emissions testing; revise the opacity monitoring provisions; add parameter monitoring for electrostatic precipitators (ESPs); add electronic submittal of notifications, semiannual reports, and performance test reports; and make technical and editorial changes. The remaining portions of the NESHAP remain unchanged.

Of 168 major source mills, an estimated 108 mills have equipment subject to the standard. This estimate consists of 97 kraft pulp mills, 1 soda pulp mill, 3 sulfite pulp mills, and 7 stand-alone semichemical pulp mills. These estimates are based on the research conducted by the EPA during the subpart MM RTR rulemaking, consultation with the industry, and an information collection request (ICR) conducted by EPA's Office of Air Quality Planning and Standards (OAQPS) in 2011. The EPA is also aware that this industry is undergoing widespread consolidation and corporate restructuring, and that no new major source facilities are being built, though one existing facility on average is expected to construct new process units each year over the 3-year period of this ICR that will be subject to Subpart MM. Mills can have more than one process unit (e.g., recovery furnace, SDT, lime kiln) onsite. 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.

None of the 108 kraft, soda, sulfite, and stand-alone semichemical pulp mills in the United States are owned by state, local, or tribal governments or the Federal government. They are owned and operated by privately owned for-profit businesses.

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

Section 112 of the CAA requires the EPA to establish NESHAP for major sources of HAP that are listed for regulation under CAA section 112(c). A major source is a stationary source that emits or has the potential to emit more than 10 tpy of any single HAP or more than 25 tpy of any combination of HAP. For major sources, the NESHAP includes technology-based standards that must reflect the maximum degree of emission reductions of HAP achievable (after considering cost, energy requirements, and non-air quality health and environmental impacts). The NESHAP are commonly referred to as maximum achievable control technology (MACT) standards. 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 cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Therefore, the NESHAP for this source category were promulgated at 40 CFR Part 63, Subpart MM in 2001.

Section 112(d)(6) of the CAA requires the EPA to review the technology-based MACT standards and revise them “as necessary (taking into account developments in practices, processes, and control technologies)” no less frequently than every 8 years. In addition, section 112(f) of the CAA requires the EPA to determine whether the MACT emissions limitations provide an ample margin of safety to protect public health. For MACT standards for HAP “classified as a known, probable, or possible human carcinogen” that “do not reduce lifetime excess cancer risks to the individual most exposed to emissions from a source in the category or subcategory to less than 1-in-1 million,” the EPA must promulgate residual risk standards for the source category (or subcategory) as necessary to provide an ample margin of safety to protect public health. In doing so, EPA may adopt standards equal to existing MACT standards, if the EPA determines that the existing standards are sufficiently protective. The EPA must also adopt more stringent standards, if necessary, to prevent an adverse environmental effect, but must consider cost, energy, safety, and other relevant factors in doing so.

Certain records and reports are necessary for the Administrator to confirm the compliance status of sources subject to NESHAP, identify any new or reconstructed sources subject to the standards, and confirm that the standards are being achieved on a continuous basis. These recordkeeping and reporting requirements are specifically authorized by section 114 of the CAA (42 U.S.C. 7414) and set out in the part 63 NESHAP General Provisions (40 CFR Part 63, Subpart A). CAA Section 114(a) states that the Administrator may require any owner or 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.

2(b) Practical Utility/Users of the Data

The control of emissions of HAP from chemical recovery combustion sources at kraft, soda, sulfite, and stand-alone semichemical pulp mills requires not only the installation of properly designed equipment, but also the operation and maintenance of that equipment. Emissions of HAP from these sources are the result of operation of the affected sources.

The standards are achieved by the reduction of pollutant emissions using process changes and control technology. 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 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 standards are being met.

Performance test reports are needed, as these are the Agency's record of a source's initial and ongoing capability to comply with the emission standards and serve as a record of the operating conditions under which compliance was achieved. The semiannual reports are used for problem identification, as a check on source operation and maintenance and for compliance determinations.

The information generated by the monitoring, recordkeeping, and reporting requirements described in this ICR is used by the Agency to ensure that facilities affected by the NESHAP continue to operate their control equipment and achieve continuous compliance with the regulation. Adequate monitoring, recordkeeping, and reporting are necessary to ensure compliance with these standards, as required by the CAA. The information collected from recordkeeping and reporting requirements is also used for targeting inspections, and is of sufficient quality to be used as evidence in court.

3. Nonduplication, Consultations, and Other Collection Criteria

The recordkeeping and reporting requested is required under 40 CFR Part 63, Subpart MM.

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.

Some of the facilities subject to this NESHAP will also be subject to New Source Performance Standards (NSPS) for Kraft Pulp Mills, 40 CFR Part 60 Subparts BB or BBa. An effort has been made to eliminate any duplication of information-gathering efforts by allowing facilities to combine excess emissions and/or summary reports for the facility, as indicated in §63.867(c)(5) of Subpart MM.

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

This section is not applicable because this is a rule-related ICR. Nevertheless, the ICR will be available for public review during the public comment period following publication of the proposed Subpart MM RTR in the Federal Register.

3(c) Consultations

Stakeholder outreach occurred with industry groups including American Forest and Paper Association (AF&PA), National Council for Air and Stream Improvement (NCASI) and member companies of these organizations. Further stakeholder and public input is expected through public comment and follow-up meetings with interested stakeholders.

In addition, the EPA/OAQPS conducted a three-part ICR in 2011 to gather data from the pulp and paper industry. The results from Part III of this ICR were used in updating the burden estimates contained in this supporting statement.

3(d) Effects of Less Frequent Collection

The proposed amendments would decrease the frequency of excess emissions reporting from quarterly to semiannually. Information collection less frequent than semiannually 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 likelihood of detecting poor operation and maintenance of control equipment and noncompliance would decrease.

3(e) General Guidelines

None of these reporting or recordkeeping requirements violate any of the regulations established by OMB under 5 CFR 1320.5.

3(f) Confidentiality

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

3(g) Sensitive Questions

None of the reporting or recordkeeping requirements contain sensitive questions.

4. The Respondents and the Information Requested

4(a) Respondents/NAICS Codes

The respondents to the recordkeeping and reporting requirements are chemical recovery combustion sources at kraft, soda, sulfite, and stand-alone semichemical pulp mills. The North American Industry Classification System (NAICS) codes for respondents affected by the standards are listed in the table below.

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

4(b) Information Requested

(i) Data Items

All data in this ICR that are recorded and/or reported are required by 40 CFR Part 63, Subpart MM. Subpart MM references 40 CFR Part 63, Subpart A for several general reporting and recordkeeping requirements that apply for all NESHAP.

A source must make the following notifications and reports:

| Notifications/Reports | |
|--|--|
| 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) |
| Results of performance test | 63.10(d)(2) |
| Electronic submittal of notifications and semiannual reports and performance test data | 63.867(d)(1)-(2) |
| Performance evaluation | 63.9(g) |
| Results of performance evaluation | 63.10(e)(2) |
| Compliance status | 63.9(h), 63.867(b)(1)-(2) |
| Excess emissions report (semiannual) | 63.10(e)(3), 63.867(c) |

A source must keep the following records:

| Recordkeeping | |
|----------------------|--|
| Requirement | Regulation Reference (40 CFR Part 63) |

| Recordkeeping | |
|--|-------------------|
| 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) |
| 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, sources 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. As part of the RTR amendments, respondents would be required to use the EPA's Electronic Reporting Tool (ERT) to submit performance test reports for test methods supported by the ERT.¹ Respondents would also be

¹ As of mid-2016, Methods 1-5, 17, 25A, and 29 are the test methods referenced in subpart MM that are included in

required to submit notifications and semiannual reports through the EPA's Compliance and Emissions Data Reporting Interface (CEDRI).

(ii) Respondent Activities

The respondent activities required by Subpart MM are listed in the following table.

| Respondent Activities |
|--|
| Read and understand the rule requirements. |
| Install, calibrate, maintain, and operate CMS. |
| Conduct 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. |
| Develop a record system (e.g., develop, acquire, install and utilize technology and systems for the purpose of processing information; adjust the existing ways to comply with any previously applicable instructions and requirements). |
| Enter information required to be recorded above. |
| Train personnel to be able to respond to a collection of information. |
| Transmit, or otherwise disclose the information. |

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

5(a) Agency Activities

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 reports, including performance test reports and excess emissions reports, required to be submitted by industry. |
| Review notifications, including notifications of construction/reconstruction, actual startup, applicability of standard, performance test, performance evaluation, and compliance status. |

the ERT. Method 308 for methanol measurement is not yet supported by the ERT.

5(b) Collection Methodology and Management

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

Information contained in the reports is entered into the EPA's Enforcement and Compliance History Online (ECHO), which is operated and maintained by the EPA's Office of Enforcement and Compliance Assurance. ECHO is the EPA's database to provide integrated compliance and enforcement information for about 800,000 regulated facilities nationwide. The EPA uses ECHO 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 the data. ECHO allows users (including the public) to search and obtain information on permits data, inspections, violations, enforcement actions, and penalties.

The records required by this regulation must be retained by the owner/operator for 5 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 requirements to be the minimum 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 – NESHP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semicheical Pulp Mills (40 CFR Part 63, Subpart MM) (Amendments).

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 3 years from these recordkeeping and reporting requirements is estimated to be 139,581 hours per year (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 for Subpart MM, and any comments received.

6(b) Estimating Respondent Costs

(i) Estimating Labor Costs

This ICR uses the following labor rates:

| Civilian Worker Rates | Labor Rates, \$/hr^a | 110% Overhead | Total, \$/hr |
|------------------------------|---------------------------------------|----------------------|---------------------|
| Managerial | \$56.04 | \$61.64 | \$117.68 |
| Technical | \$51.14 | \$56.25 | \$107.39 |
| Clerical | \$25.10 | \$27.61 | \$52.71 |

^a <http://data.bls.gov/cgi-bin/print.pl/news.release/ecec.t02.htm>

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

(ii) Estimating Capital/Startup and O&M 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, 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 (O&M) costs are the ongoing costs to maintain the monitors.

(iii) Capital/Startup vs. O&M Costs

The table below summarizes the capital/startup and O&M costs associated with monitors and performance tests.

| Capital/Startup vs. O&M Costs | | | | | | |
|---|---|--|---|--|---|---|
| (A) Cost Item | (B) 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) |
| ESP voltage and current monitors ^a | \$31,000 | 183 | \$5,673,000 | \$4,185 | 183 | \$765,855 |
| Performance tests: | | | | | | |
| Method 5 for PM | \$10,000 | 438 | \$4,380,000 | | | |
| Method 25A for THC | \$14,000 | 6 | \$84,000 | | | |
| Method 308 for methanol | \$14,000 | 145 | \$2,030,000 | | | |
| Retests | | | \$1,298,800 | | | |
| Total | | | \$13,465,800 | | | \$765,855 |
| Total annualized capital + O&M cost ^b | | | | | | \$3,289,414 |

^a ESP monitor O&M costs were estimated as 13.5% of the initial monitor cost, including 3.5% for maintenance and materials, 6% for overhead, and 4% for taxes, insurance, and administration.

^b Annualized capital costs were estimated assuming a 15-year equipment life at 7% interest for ESP parameter monitors (with a capital recovery factor of 0.1098), and a 5-year payment period at 7% interest for initial performance tests (with a capital recovery factor of 0.2439).

The total capital/startup costs for this ICR are \$13,465,800. This is the total of column D in the above table. The annualized capital/startup costs are \$2,523,559. The total annual O&M costs are \$765,855. This is the total of column G. The average annualized cost for capital/startup and O&M costs to industry over the next 3 years of the ICR is estimated to be \$3,289,414.

6(c) Estimating Agency Burden and Cost

The only costs to the Agency are costs associated with observation of the initial performance tests and analysis of the reported information. Publication and distribution of the information are part of the ECHO program. Examination of records to be maintained by the respondents will occur as part of the periodic inspection of sources, which is part of the EPA's overall compliance and enforcement program. The average annual Agency cost during the 3 years of the ICR is estimated to be \$43,515.

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

| Agency Worker Rates | Labor Rates, \$/hr ^a | 60% Overhead | Total, \$/hr |
|----------------------------|--|---------------------|---------------------|
| Managerial (GS-13, step 5) | \$40.10 | \$24.06 | \$64.16 |
| Technical (GS-12, step 1) | \$29.76 | \$17.86 | \$47.62 |
| Clerical (GS-6, step 3) | \$16.10 | \$9.66 | \$25.76 |

^a https://www.opm.gov/policy-data-oversight/pay-leave/salaries-wages/salary-tables/pdf/2016/GS_h.pdf

These rates are from the Office of Personnel Management (OPM), 2016 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) (Amendments).

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

Based on our research for this ICR, there are approximately 108 existing sources currently subject to the standard, all of which will keep records and submit reports. 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 the regulation in the next 3 years. The average number of respondents is calculated using the following table that addresses the 3 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 | 108 | 0 | 1 | 108 |
| 2 | 1 | 108 | 0 | 1 | 108 |
| 3 | 1 | 108 | 0 | 1 | 108 |
| Average | 1 | 108 | 0 | 1 | 108 |

^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 3-year period of this ICR is 108.

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

| Total Annual Responses | | | | |
|--|--|--|---|---|
| (A) Information Collection Activity ^a | (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 | 1 | 0 | 1 |
| Notification of actual startup | 1 | 1 | 0 | 1 |
| Notification of applicability of standard | 1 | 1 | 0 | 1 |
| Notification of performance test/ retest | 43 | 1 | 0 | 43 |
| Notification of performance evaluation | 43 | 1 | 0 | 43 |
| Notification of compliance status | 1 | 1 | 0 | 1 |
| 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 | 103 | 2 | 0 | 206 |
| | | | Total | 350 |

^a Notifications and semiannual reports submitted through CEDRI. Report of performance test/retest submitted through ERT.

The number of Total Annual Responses is 350, all of which will be submitted electronically.

The total annual labor costs are \$14,388,866. 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 Semicheical Pulp Mills (40 CFR Part 63, Subpart MM) (Amendments).

6(e) Bottom Line Burden Hours and Cost Tables

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

(i) Respondent Tally

The total annual labor hours are 139,581. Details regarding these estimates may be found in Table 1: Annual Respondent Burden and Cost – NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semicheical Pulp Mills (40 CFR Part 63, Subpart MM) (Amendments). Furthermore, the annual public reporting and

recordkeeping burden for this collection of information is estimated to average 399 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are \$3,289,414. The cost calculations are detailed in Section 6(b)(iii), Capital/Startup vs. O&M Costs.

(ii) The Agency Tally

The average annual Agency burden and cost over next 3 years is estimated to be 895 labor hours at a cost of \$43,515. See 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) (Amendments).

6(f) Reasons for Change in Burden

This ICR is prepared for amendments to the NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (40 CFR, Part 63, Subpart MM). These amendments: (1) adjust references to the Part 63 General Provisions (40 CFR, Part 63, Subpart A) and revise provisions in the NESHAP (40 CFR Part 63, Subpart MM) to remove the SSM exemption and SSM plan requirement; (2) add periodic emissions testing; (3) revise the opacity monitoring provisions; (4) add parameter monitoring for ESPs; (5) add electronic submittal of notifications, semiannual reports, and performance test reports; and (6) make technical and editorial changes. Where applicable, adjustments for these amendments are reflected in Tables 1 and 2 of this ICR.

The number of affected mills changed because of: (1) continued consolidation and closures within the pulp and paper industry, which reduced the number of mills previously affected by Subpart MM; and (2) updates to the number of affected mills based on EPA's 2011 pulp and paper sector survey and subsequent updates from other information sources.

Costs per labor hour increased due to increases in labor rates. In addition, the burden estimate for reading and understanding the rule requirements was increased to reflect the actual time it would take industry to review the amended rule. Burden estimates were added for the industry to prepare for/attend performance tests and retests, report the results of the performance tests/retests through the ERT, and record ESP parameters. Burden estimates were removed for developing SSM plans and submitting periodic SSM reports. Burden estimates were reduced by changing the excess emissions reporting frequency from quarterly to semiannually.

6(g) Burden Statement

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 399 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, the EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OAR-2014-0741. 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 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 EPA Docket Center, 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) 566-1742. Send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, Attention: Desk Officer for EPA, 725 17th Street, NW, Washington, DC 20503. Please include the EPA Docket ID Number EPA-HQ-OAR-2014-0741 and OMB Control Number 2060-NEW in any correspondence.

Part B of the Supporting Statement

This part is not applicable because no statistical methods were used in data collection associated with the rule.

Table 1: Annual Respondent Burden and Cost – NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfitic, and Stand-Alone Semichemical Pulp Mills (40 CFR Part 63, Subpart MM) (Amendments)

| 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- hours per year (E=CxD) | (F) Managemen t person hours per year (Ex0.05) | (G) Clerical person hours per year (Ex0.1) | (H) Total Cost per year ^b |
|---|--|---|---|---|---|---|---|--|
| 1. Applications | N/A | | | | | | | |
| 2. Surveys and studies | N/A | | | | | | | |
| 3. Reporting requirements | | | | | | | | |
| A. Read and understand rule requirements ^c | 30 | 1 | 30 | 36 | 1,080 | 54 | 108 | \$128,033 |
| B. Required activities ^d | | | | | | | | |
| Prepare for initial/periodic performance test | 24 | 1 | 24 | 36 | 864 | 43 | 86 | \$102,427 |
| Attend initial/periodic performance test | 24 | 2 | 48 | 36 | 1,728 | 86 | 173 | \$204,853 |
| Prepare for retest | 24 | 1 | 24 | 7 | 173 | 8.6 | 17 | \$20,485 |
| Attend retest | 24 | 2 | 48 | 7 | 346 | 17 | 35 | \$40,971 |
| C. Create information | See 3B | | | | | | | |
| D. Gather existing information | See 3B | | | | | | | |
| E. Write report | | | | | | | | |
| Notifications (through CEDRI) ^{e,f} | | | | | | | | |
| Notification of construction/reconstruction | 2 | 1 | 2 | 1 | 2 | 0.1 | 0.2 | \$237 |
| Notification of actual startup | 2 | 1 | 2 | 1 | 2 | 0.1 | 0.2 | \$237 |
| Notification of applicability of standard | 2 | 1 | 2 | 1 | 2 | 0.1 | 0.2 | \$237 |
| Notification of performance test/retest | 2 | 1 | 2 | 43 | 86 | 4.3 | 8.6 | \$10,243 |
| Notification of performance evaluation | 2 | 1 | 2 | 43 | 86 | 4.3 | 8.6 | \$10,243 |
| Notification of compliance status | 80 | 1 | 80 | 1 | 80 | 4 | 8 | \$9,484 |
| Report of performance test/retest (through ERT) ^g | 8 | 1 | 8 | 43 | 346 | 17 | 35 | \$40,971 |
| Excess emissions report (through CEDRI) ^h | | | | | | | | |
| Semiannual reports of monitoring exceedances and periods of noncompliance | 16 | 2 | 32 | 5 | 160 | 8 | 16 | \$18,968 |
| Semiannual reports of no exceedances | 8 | 2 | 16 | 103 | 1,648 | 82 | 165 | \$195,369 |
| Subtotal for Reporting Requirements | | | | | | 7,593 | | \$782,757 |
| 4. Recordkeeping requirements\ | | | | | | | | \$0 |
| A. Read instructions | See 3A | | | | | | | \$0 |

| 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- hours per year (E=CxD) | (F) Managemen t person hours per year (Ex0.05) | (G) Clerical person hours per year (Ex0.1) | (H) Total Cost per year ^b |
|---|--|---|---|---|---|---|---|--|
| B. Plan activities | See 3B | | | | | | | \$0 |
| C. Implement activities | See 3B | | | | | | | \$0 |
| D. Develop record system ^l | 40 | 1 | 40 | 36 | 1,440 | 72 | 144 | \$170,711 |
| E. Time to enter and transmit information | | | | | | | | \$0 |
| Records and documentation of supporting calculations for compliance determinations ^j | 8 | 1 | 8 | 43 | 346 | 17 | 35 | \$40,971 |
| Record of compliant monitoring parameter ranges | 2 | 1 | 2 | 43 | 86 | 4.3 | 8.6 | \$10,243 |
| 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 ^k | 2 | 1 | 2 | 0.7 | 1.3 | 0.07 | 0.13 | \$158 |
| Records of failures to meet standards ^l | 2 | 12 | 24 | 5 | 120 | 6 | 12 | \$14,226 |
| Records of black liquor solids firing rates for recovery furnaces and semichemical combustion units ^m | 1.5 | 52 | 78 | 105 | 8,190 | 410 | 819 | \$970,918 |
| Records of lime production for lime kilns ⁿ | 1.5 | 52 | 78 | 98 | 7,644 | 382 | 764 | \$906,190 |
| Records of CMS data | | | | | | | | \$0 |
| Record wet scrubber and RTO parameters (per shift) ^o | 0.5 | 1,050 | 525 | 108 | 56,700 | 2,835 | 5,670 | \$6,721,740 |
| Record ESP parameters (per day) ^p | 0.25 | 350 | 88 | 183 | 16,013 | 801 | 1,601 | \$1,898,269 |
| Compile data for semiannual periods ^q | 96 | 2 | 192 | 108 | 20,736 | 1,037 | 2,074 | \$2,458,236 |
| Enter/verify information for semiannual reports ^r | 8 | 2 | 16 | 108 | 1,728 | 86 | 173 | \$204,853 |
| F. Time to train personnel | | | | | | | | |
| Initial training ^s | 40 | 1 | 40 | 1 | 40 | 2 | 4 | \$4,742 |
| Refresher training ^t | 16 | 1 | 16 | 108 | 1,728 | 86 | 173 | \$204,853 |
| Subtotal for Recordkeeping Requirements | | | | | 131,988 | | | \$13,606,109 |
| TOTAL LABOR BURDEN AND COST | | | | | 139,581 | | | \$14,388,866 |
| Capital/Startup Costs | | | | | | | | |
| Performance tests ^u | | | | | | | | |
| Method 5 (PM) | | | | | | | | \$4,380,000 |
| Method 25A (THC) | | | | | | | | \$84,000 |
| Method 308 (methanol) | | | | | | | | \$2,030,000 |

| 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- hours per year (E=CxD) | (F) Managem ent person hours per year (Ex0.05) | (G) Clerical person hours per year (Ex0.1) | (H) Total Cost per year ^b |
|--|--|---|---|---|---|---|---|--|
| Retests | | | | | | | | \$1,298,800 |
| ESP voltage and current monitors ^v | | | | | | | | \$5,673,000 |
| TOTAL CAPITAL/STARTUP COSTS | | | | | | | | \$13,465,800 |
| Annualized Capital Costs | | | | | | | | |
| Performance tests ^w | | | | | | | | \$1,900,664 |
| ESP voltage and current monitors ^x | | | | | | | | \$622,895 |
| Subtotal for Annualized Capital Costs | | | | | | | | \$2,523,559 |
| Annual O&M Costs | | | | | | | | |
| O&M of ESP monitors ^y | | | | | | | | \$765,855 |
| Subtotal for Annual O&M Costs | | | | | | | | \$765,855 |
| TOTAL ANNUALIZED COSTS (Annualized Capital + O&M Costs) | | | | | | | | \$3,289,414 |

^a We estimate that the number of existing sources subject to the rule is 108 pulp mills. We estimate two new recovery furnaces, two new SDTs, and one new lime kiln, located at three existing pulp mills, will become subject to the rule, for an average of one mill with new affected sources per year over the ICR period.

^b This ICR uses the following labor rates: \$117.68 per hour for Executive, Administrative, and Managerial labor; \$74.15 per hour for Technical labor, and \$52.71 per hour for Clerical labor. These rates are from the United States Department of Labor, Bureau of Labor Statistics, March 2014, 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 estimate that it will take the respondent 30 hours to read and understand rule requirements; this is a one-time requirement (108 respondents/3 years = 36).

^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. This will occur once during the ICR period (108 respondents/3 years = 36). In addition, we estimate that 20% of respondents (0.2 x 36 respondents = 7) 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 them through the EPA's CEDRI.

^f We estimate that it will take the respondent 80 hours once per year to prepare the notification of compliance status and submit it through the EPA's CEDRI.

^g Hard copy report of performance test/retest is included in capital/startup costs. Submittal of performance test/retest data through the EPA's ERT is estimated to require 8 hours (test: 108 respondents/3 years = 36; retest: 0.2 x 36 respondents = 7; total: 36 + 7 = 43).

^h We estimate that 5% of respondents 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 will each take 8 hours two times per year to write reports of no exceedances and submit them through the EPA's CEDRI.

ⁱ We estimate that it will take the respondent 40 hours to make a one-time adjustment of existing data acquisition systems to account for rule changes regarding startup and shutdown and comply with revised monitoring requirements (108 respondents/3 years = 36).

^j 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.

^k We estimate that two existing mills will install new recovery furnaces over 3 years, for an average of 0.7 mill with new recovery furnaces per year over the ICR period. Based on current industry trends, the new furnace is expected to be a NDCE recovery furnace equipped with a dry ESP system.

^l We estimate that 5% of respondents 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.

^m We estimate 105 kraft, soda, and stand-alone semichemical pulp mills 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.

ⁿ We estimate 98 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.

^o 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.

- ^p We estimate that there are 183 recovery furnaces and lime kilns with ESPs that will need to record ESP parameters. We estimate that each respondent will take 0.25 hours 350 times per year to keep these records.
- ^q We estimate that each respondent will take 96 hours per semiannual period to compile data.
- ^r We estimate that each respondent will take 8 hours two times per year to verify information for reports.
- ^s We estimate that it will take the respondent 40 hours (1 week) once per year to train personnel.
- ^t We estimate that it will take each respondent 16 hours to provide refresher training for personnel.
- ^u We estimate that 438 sources will need to conduct initial/periodic PM performance tests, at \$10,000 per source, 6 sources will need to conduct periodic THC performance tests, at \$14,000 per source, and 145 sources will need to conduct initial/periodic methanol tests, at \$14,000 per source. We also estimate that 20% of respondents will repeat performance test due to failure.
- ^v We estimate that 183 recovery furnaces and lime kilns with ESPs will need to install ESP voltage and current monitors at a cost of \$31,000/source.
- ^w We have assumed a 5-year payment period at 7% interest.
- ^x We have assumed a 15-year payment period at 7% interest.
- ^y We estimate an O&M cost equal to 3.5% of capital cost for maintenance and materials, 6% for overhead, and 4% for taxes, insurance, and administration.

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

| Activity | (A) EPA person- hours per occurrence | (B) No. of occurrences per plant per year | (C) EPA person hours per plant per year (AxB) | (D) Plants per year ^a | (E) Technical person- hours per year (CxD) | (F) Management person-hours per year (Ex0.05) | (G) Clerical person- hours per year (Ex0.1) | (H) Cost, \$ ^b |
|--|---|---|---|--|--|---|--|------------------------------|
| 1. Attend initial/periodic performance test ^c | 24 | 1 | 24 | 3.6 | 86 | 4.3 | 8.6 | \$4,614 |
| 2. Attend retest ^{c,d} | 24 | 1 | 24 | 0.7 | 17 | 0.9 | 1.7 | \$923 |
| 3. Report review | | | | | | | | |
| Notification of construction/reconstruction ^e | 2 | 1 | 2 | 1 | 2 | 0.1 | 0.2 | \$107 |
| Notification of actual startup ^e | 2 | 1 | 2 | 1 | 2 | 0.1 | 0.2 | \$107 |
| Notification of applicability of standard ^e | 2 | 1 | 2 | 1 | 2 | 0.1 | 0.2 | \$107 |
| Notification of initial performance test ^e | 2 | 1 | 2 | 43 | 86 | 4.3 | 8.6 | \$4,614 |
| Notification of performance evaluation ^e | 2 | 1 | 2 | 43 | 86 | 4.3 | 8.6 | \$4,614 |
| Review of notification of compliance status ^f | 4 | 1 | 4 | 1 | 4 | 0.2 | 0.4 | \$214 |
| Review of excess emissions report | | | | | | | | |
| Semiannual reports of monitoring exceedances and periods of noncompliance ^g | 8 | 2 | 16 | 5 | 80 | 4 | 8 | \$4,272 |
| Semiannual reports of no exceedances ^h | 2 | 2 | 4 | 103 | 412 | 21 | 41 | \$22,001 |
| TOTAL ANNUAL BURDEN AND COST (SALARY) | | | | | 895 | | | \$41,571 |
| Travel Expenses for Tests Attended ⁱ | | | | | | | | \$1,944 |
| TOTAL ANNUAL COST (SALARY + EXPENSES) | | | | | | | | \$43,515 |

^a We estimate that the number of existing sources subject to the rule is 108. We estimate two new recovery furnaces, two new SDTs, and one new lime kiln, located at three existing pulp mills, will become subject to the rule, for an average of one mill with new affected sources per year over the ICR period.

^b This cost is based on the following labor rates which incorporate a 1.6 benefits multiplication factor to account for government overhead expenses: \$64.16 Managerial rate (GS-13, Step 5, \$40.10 x 1.6), \$47.62 Technical rate (GS-12, Step 1, \$29.76 x 1.6), and \$25.76 Clerical rate (GS-6, Step 3, \$16.10 x 1.6). These rates are from the Office of Personnel Management (OPM) 2016 General Schedule which excludes locality rates of pay.

^c We estimate that it will take EPA personnel 24 hours once per year to attend initial and periodic performance tests at 10 percent of plants.

^d We estimate that 20 percent of respondents will repeat performance test due to failure and that EPA personnel will attend 10 percent of retests.

^e We estimate that it will take EPA personnel 2 hours once per year to complete report review.

^f We estimate that it will take EPA personnel 4 hours once per year to review the compliance status report.

^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 108 = 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 ($95\% \times 108 = 103$).

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 to attend performance tests.