**SUPPORTING STATEMENT**

 **ENVIRONMENTAL PROTECTION AGENCY**

**NESHAP for Pulp and Paper Production (40 CFR Part 63, Subpart S) (Renewal)**

**1. Identification of the Information Collection**

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

NESHAP for Pulp and Paper Production (40 CFR Part 63, Subpart S) (Renewal), EPA ICR Number 1657.10, OMB Control Number 2060-0387.

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

The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Pulp and Paper Production (40 CFR Part 63, Subpart S) were proposed on December 17, 1993, and promulgated on April 15, 1998. These regulations apply to both existing facilities and new facilities that produce pulp, paper, or paperboard by employing kraft, soda, sulfite, semi-chemical, or mechanical pulping processes using wood, or any process using secondary or non-wood fiber and that emits 10 tons per year or more of any hazardous air pollutant (HAP) or 25 tons per year or more of any combination of HAPs. Affected sources are all the HAP emission points in the pulping and bleaching system for mechanical pulping processes using wood and any process using secondary or non-wood fiber. New facilities include those that commenced construction, or reconstruction after the date of proposal. This information is being collected to assure compliance with 40 CFR Part 63, Subpart S.

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

Any owner/operator subject to the provisions of this part shall maintain a file of these measurements and retain the file for at least five years following the date of such measurements, maintenance reports, and records. All reports required to be submitted electronically are submitted through the EPA's Central Data Exchange (CDX), using the Compliance and Emissions Data Reporting Interface (CEDRI), where the delegated state or local authority can review them. If there is no such delegated authority, the EPA’s regional offices can review them.  All other reports are sent to the delegated state or local authority. If there is no such delegated authority, the reports are sent directly to the EPA’s regional offices. The use of the term "Designated Administrator" throughout this document refers to the U.S. EPA or a delegated authority such as a state agency. The term "Administrator" alone refers to the U.S. EPA Administrator.

The ‘burden’ to the “Affected Public” may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Pulp and Paper Production (40 CFR Part 63, Subpart S) (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 Pulp and Paper Production (40 CFR Part 63, Subpart S) (Renewal). There are approximately 104 pulp and paper production facilities (including 101 chemical pulp mills and 3 non-integrated paper mills that bleach with chlorinated compounds), which are owned and operated by the pulp and paper production industry. None of the (number) facilities in the United States are owned by either state, local, or tribal entities or by the Federal government. They are all owned and operated by privately-owned, for-profit businesses. We assume that they will all respond to EPA inquiries.

 Based on our consultations with industry representatives, there are an average of 1 affected facility at each plant site and each plant site has only one respondent (i.e., the owner/operator of the plant site).

Over the next three years, approximately 104 respondents per year will be subject to these standards, and no additional respondents per year will become subject to these same standards. However, approximately 15 percent of the existing affected facilities (16 respondents) will rebuild one or more existing process units in any given year. The estimated number of respondents has decreased from the currently approved ICR based on Agency review of data collected from ECHO, the Agency’s internal database of information collection responses from the pulp and paper industry, and current permits for identified facilities.

The Office of Management and Budget (OMB) approved the currently active ICR with the following “Terms of Clearance”:

“Upon resubmission, the agency must update the burden estimates to accurately reflect the number of respondents in industry and verify that there are no reporting or recordkeeping requirements for States in 40 CFR part 63, subpart S. The agency must also ensure that burden is calculated for all of the requirements and that the requirements and burden tables are consistent throughout the supporting statement. The agency must provide screen shots of the electronic mode of collection that is used for this information collection. In addition, the agency must have a burden statement that aligns with the requirements under 5 CFR 1320.8(b)(3) and placement of the OMB control number for on-line submissions on the initial screen per 5 CFR 1320.3(f)(2).”

In renewing the currently approved ICR, the agency has reviewed the number of respondents in industry and updated the burden estimates accordingly. In this case, we did not identify any changes to the number of respondents in the currently approved ICR. There are no reporting requirements for states. ‘Burden’ has been calculated for all requirements, which are reflected in the burden tables in the supporting statement. All electronic collection in this information collection is submitted through EPA's CEDRI or ERT, as discussed in section 4(b)(i) of this document. Additional Paperwork Reduction Act requirements for CEDRI and ERT, including the burden statement and OMB control number, are available at: *https://www.epa.gov/electronic-reporting-air-emissions/paperwork-reduction-act-pra-cedri-and-ert*.

**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 from pulp and paper production facilities either cause or contribute to air pollution that may reasonably be anticipated to endanger public health and/or welfare. Therefore, the NESHAP were promulgated for this source category at 40 CFR Part 63,Subpart S.

**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 capability to comply with these emission standards. Continuous emission monitors are used to ensure compliance with these same standards at all times. During the performance test a record of the operating parameters under which compliance was achieved may be recorded and used to determine compliance in place of a continuous emission monitor.

The notifications required in these standards are used to inform the Agency or delegated authority when a source becomes subject to the requirements of these regulations. The reviewing authority may then inspect the source to check if the pollution control devices are properly installed and operated and leaks are being detected and repaired, and that these standards 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.

 Additionally, the EPA is requiring electronic reporting for certain notifications or reports. The EPA is requiring that owners or operators of affected sources would submit electronic copies of initial notifications required in 40 CFR 63.9(b), notifications of change in information already provided as required in 40 CFR 63.9(j), and performance test reports and relative accuracy test audit (RATA) data through the EPA's Central Data Exchange (CDX), using the Compliance and Emissions Data Reporting Interface (CEDRI). For the notifications required in 40 CFR 63.9(b) and 63.9(j), owners and operators would be required to upload a PDF of the required notifications.

CEDRI includes the Electronic Reporting Tool (ERT) software, which is used by facilities to generate electronic reports of performance tests and RATA data. The EPA is also requiring that 40 CFR Part 63, Subpart S performance test reports, and RATA be submitted through the EPA’s ERT.

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

The requested recordkeeping and reporting are required under 40 CFR Part 63, Subpart S.

**3(a) Non-duplication**

For reports required to be submitted electronically, the information is sent through the EPA's CDX, using CEDRI, where the appropriate EPA regional office can review it, as well as for state and local agencies that have been delegated authority. If a state or local agency has adopted under its own authority its own standards for reporting or data collection, adherence to those non-Federal requirements does not constitute duplication.

 For all other reports, 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 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* (87 FR 43843) on July 22, 2022. 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 these standards, 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. The growth rate for the industry is based on our consultations with the Agency’s internal industry experts. Approximately 102 respondents will be subject to these standards over the three-year period covered by this ICR. The estimated number of respondents reflects Agency review of data collected from ECHO, the Agency’s internal database of information collection responses from the pulp and paper industry, and current permits for identified facilities.

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 that these 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) 463-2599, and the National Paper Trade Association (NPTA), at (312) 321-4092.

 It is our policy to respond after a thorough review of comments received since the last ICR renewal, as well as for 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 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 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, EPA would be prevented from pursuing the violators due to either the destruction or nonexistence of essential records.

**3(f) Confidentiality**

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

**3(g) Sensitive Questions**

The reporting or recordkeeping requirements in these standards 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 and operators of pulp and paper mills that are major sources of HAP. The United States Standard Industrial Classification (SIC) code for the respondents affected by the standards, and the corresponding North American Industry Classification System (NAICS) codes for this source category are shown below:

|  |  |  |
| --- | --- | --- |
| **Standard (40 CFR Part 63, Subpart S)** | **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 Pulp and Paper Production (40 CFR Part 63, Subpart S).

A source must make the following reports:

| **Notifications** |
| --- |
| Notification of construction and reconstruction | §63.5(d) |
| Construction or modification application | §63.455(d) |
| Initial notification | §63.9(b)(2) |
| Anticipated startup | §63.9(b) |
| Actual startup | §63.9(b)(4)(v) |
| Initial performance test | §§63.7(b), 63.9(e) |
| Rescheduled initial performance test | §63.7(b)(2) |
| Demonstration of continuous monitoring system | §63.9(g) |
| Physical or operational change | §63.5(b)(4) |
| Compliance status | §63.9(h) |
| Notification of changes in information (reclassification to area source status or to revert to major source status) (electronic submission) | §63.9(b), §63.9(j) |

| **Reports** |
| --- |
| Source status report | §63.10(e)(3) |
| Semiannual Control Strategy Update  | §63.455(b) |
| Periodic malfunction reports | §63.455(g) |
| Performance test reports and CEMS RATA performance evaluation reports (electronic submission) | §63.10(d)(2), §63.455(h) |

A source must keep the following records:

| **Recordkeeping** |
| --- |
| Periods where the continuous monitoring system is inoperative | §63.10(b)(2) |
| Records of malfunction | §63.454(g) |
| Emission test results and other data needed to determine emissions | §63.454(a) |
| All reports and notifications | §63.10(b) |
| Record of applicability | §63.10(b)(3) |
| Records for sources with continuous monitoring systems | §63.10(c) |
| Records are required to be retained for five years. Records must be kept onsite for the first two years. For the remaining three years, records can be kept in a readily accessible off-site location. | §63.454 |
| Site specific inspection plans for closed vent systems | §63.454(b) |

Electronic Reporting

Some of the respondents are using monitoring equipment that automatically records parameter data. Although personnel at the affected facility must still evaluate the data, internal automation has significantly reduced the burden associated with monitoring and recordkeeping at a plant site.

The rule was amended to include electronic reporting provisions on September 11, 2012. Respondents are required to use the EPA’s Electronic Reporting Tool (ERT) to develop performance test reports and CEMS RATA performance evaluation reports and submit them through the EPA’s Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA’s Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The ERT is an application rather than a form, and the requirement to use the ERT is applicable to numerous subparts. The splash screen of the ERT contains a link to the Paperwork Reduction Act (PRA) requirements, such as the OMB Control Number, expiration date, and burden estimate for this and other subparts. Respondents are also required to submit electronic copies of notifications and certain reports through EPA’s CEDRI. The notification is an upload of their currently required notification in portable document format (PDF) file. For purposes of this ICR, it is assumed that there is no additional burden associated with the proposed requirement for respondents to submit the notifications and reports electronically.

Electronic copies of records may also be maintained in order to satisfy Federal recordkeeping requirements. For additional information on the Paperwork Reduction Act requirements for CEDRI and ERT for this rule, see: [*https://www.epa.gov/electronic-reporting-air-emissions/paperwork-reduction-act-pra-cedri-and-ert*](https://www.epa.gov/electronic-reporting-air-emissions/paperwork-reduction-act-pra-cedri-and-ert).

**(ii) Respondent Activities**

| **Respondent Activities** |
| --- |
| Familiarization with the regulatory requirements. |
| Install, calibrate, maintain, and operate CMS for each of the following affected units: 1.1 Non-Sulfite Pulping Process choice of:a. provide documentation that vent streams are introduced to the flame zone of a boiler, lime kiln, or recovery furnace, orb. provide documentation that the control incinerator is operating at a minimum level of 1600 F and 0.75 second residence time, orc. Performance test of control device using Method 308.1.2. Sulfite Pulping Process - performance test of control device using test method 308.2.1. Bleaching Process Vent Scrubber - performance test of scrubber or control device using test Method 26A.3.1 Non-Sulfite Pulping Wastewater Treatmenta. performance test of condensate segregation and control device using test method 305 orb. performance test of biotreatment unit using test Method 304.3.2 Sulfite Pulping Process a. performance test of control device using test Method 305. |
| Perform initial performance test, Reference Method 26A, 304, 305, 308, and repeat performance tests if necessary. |
| Conduct initial and annual inspections of enclosures, closed vent and wastewater conveyance systems using test Method 21. |
| Write the notifications and reports listed above. |
| Enter information required to be recorded above. |
| Submit the required reports developing, acquiring, installing, and utilizing technology and systems for collecting, validating, and verifying information. |
| Develop, acquire, install, and utilize technology and systems for processing and maintaining information. |
| Develop, acquire, install, and utilize technology and systems for disclosing and providing information. |
| 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 repeat performance tests. |
| 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 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 reported by state and local governments in the ICIS Air database, which is operated and maintained by EPA's Office of Compliance. 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 the data.

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

**5(c) Small Entity Flexibility**

Approximately 5 percent of the affected HAP major source facilities are considered small business entities, defined as being independently owned and operated and not dominant in their field of operations. The recordkeeping and reporting requirements were selected within the context of this specific subpart and the specific process equipment and pollutants. The impact on small businesses was accounted for in the regulation development. 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 at the end of this document in Table 1: Annual Respondent Burden and Cost – NESHAP for Pulp and Paper Production (40 CFR Part 63, Subpart S) (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 30,800 hours (Total Labor Hours from Table 1 below). These hours are based on Agency studies and background documents from the development of these regulations, 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 $157.61 ($75.05 + 110%)

Technical $123.94 ($59.02 + 110%)

Clerical $62.52 ($29.77 + 110%)

These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2021, “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 varying industry wage rates and the additional overhead business costs of employing workers beyond their wages and benefits, including business expenses associated with hiring, training, and equipping their employees.

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

The type of industry costs associated with the information collection activities in the subject standard(s) are both labor costs which are addressed elsewhere in this ICR and the costs associated with performance testing. The capital/startup costs are one-time costs when a facility becomes subject to the regulation. The annual operation and maintenance costs are the ongoing costs to conduct performance tests, assumed to be performed by contractors.

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

Continuous monitoring requirements are for parametric monitoring and these systems are already in place; therefore, no new equipment would be required by the recordkeeping and reporting requirements. It is assumed that all mills will contract a testing company to provide sampling and analytical services for air and water tests. Based on EPA’s experience with the test methods required for this rule, the purchase of service for each method is estimated below. These estimates include labor, materials, and analytical costs.

| **Capital/Startup vs. Operation and Maintenance (O&M) Costs** |
| --- |
| (A)Emission Test | (B)Capital/Startup Cost for One Respondent | (C)Number of New Respondents  | (D)Total Capital/Startup Cost, (B X C) | (E)Annual O&M Costs for One Respondent | (F)Number of Respondents with O&M | (G)Total O&M,(E X F) |
| Method 308 | NA |  |  | $14,000 | 8 | $112,000 |
| Method 26A | NA |  |  | $10,000 | 34 | $340,000 |
| Method 304 | NA |  |  | $11,000 | 3 | $33,000 |
| Method 305 | NA |  |  | $16,000 | 5 | $80,000 |
| Method 21 | NA |  |  | $3,000 | 67 | $201,000 |
| **Total** |  |  |  |  |  | **$766,000** |

 Note: Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding.

The total capital/startup costs for this ICR are $0. This is the total of column D in the above table.

The total operation and maintenance (O&M) costs for this ICR are $766,000. This is the total of column G.

The average annual cost for capital/startup and operation and maintenance costs to industry over the next three years of the ICR is estimated to be $766,000. These are recordkeeping costs.

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

The only costs to the Agency are those costs associated with analysis of the reported information. The 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 $223,000.

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

 Managerial $70.56 (GS-13, Step 5, $44.10 + 60%)

 Technical $52.37 (GS-12, Step 1, $32.73 + 60%)

 Clerical $28.34 (GS-6, Step 3, $17.17 + 60%)

These rates are from the Office of Personnel Management (OPM), 2022 General Schedule, which excludes locality rates of pay. The rates have been increased by 60 percent to account for the benefit packages available to Federal government employees. Details upon which this estimate is based appear at the end of this document in Table 2: Average Annual EPA Burden and Cost – NESHAP for Pulp and Paper Production (40 CFR Part 63, Subpart S) (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 104 existing respondents will be subject to these standards. It is estimated that no new respondents will become subject to these same standards, however 15% (16 respondents) will rebuild one or more process units in any given year. The overall average number of respondents, as shown in the table below, is 104 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 1 | (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 | 16 | 104 | 0 | 16 | 104 |
| 2 | 16 | 104 | 0 | 16 | 104 |
| 3 | 16 | 104 | 0 | 16 | 104 |
| Average | 16 | 104 | 0 | 16 | 104 |

1 New respondents include sources with constructed and reconstructed, and modified affected facilities. 16 respondents will rebuild one or more process units in a given year. In this standard, existing respondents submit initial notifications.

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 104.

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 ResponsesE=(BxC)+D |
| Initial notification report | 0 | 1 | 0 | 0 |
| Notification of compliance status | 0 | 1 | 0 | 0 |
| Initial compliance strategy report | 0 | 1 | 0 | 0 |
| Compliance strategy report update | 0 | 1 | 0 | 0 |
| Semiannual summary report | 104 | 2 | 0 | 208 |
| Continuous monitoring / exceedance report | 16 | 2 | 0 | 32 |
| Notification of performance test | 117 | 1 | 0 | 117 |
| Notification of construction / reconstruction | 16 | 1 | 0 | 16 |
| Notification of actual startup | 16 | 1 | 0 | 16 |
|  |  |  | Total | **389** |

The number of Total Annual Responses is 389. Note that 16 respondents have been double-counted in the above table because they have both existing affected facilities and new affected facilities.

The total annual labor costs are $3,700,000. Details regarding these estimates may be found at the end of this document in Table 1: Annual Respondent Burden and Cost – NESHAP for Pulp and Paper Production (40 CFR Part 63, Subpart S) (Renewal).

**6(e) Bottom Line Burden Hours and Cost Tables**

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

**(i) Respondent Tally**

The total annual labor hours are 30,800 hours. Details regarding these estimates may be found below in Table 1: Annual Respondent Burden and Cost – NESHAP for Pulp and Paper Production (40 CFR Part 63, Subpart S) (Renewal).

We assume that burdens for managerial tasks take 5% of the time required for technical tasks because the typical tasks for managers are to review and approve reports. Clerical burdens are assumed to take 10% of the time required for technical tasks because the typical duties of clerical staff are to proofread the reports, make copies, and maintain records.

Furthermore, the annual public reporting and recordkeeping burden for this collection of information is estimated to average 79 hours per response.

The total annual capital/startup and O&M costs to the regulated entity are $766,000. 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 4,370 labor hours at a cost of $223,000; see below in Table 2: Average Annual EPA Burden and Cost – NESHAP for Pulp and Paper Production (40 CFR Part 63, Subpart S) (Renewal).

We assume that burdens for managerial tasks take 5% of the time required for technical tasks because the typical tasks for managers are to review and approve reports. Clerical burdens are assumed to take 10% of the time required for technical tasks because the typical duties of clerical staff are to proofread the reports, make copies and maintain records.

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

The decrease in burden from the most-recently approved ICR is due to various adjustments. The adjustment decrease is due to a decrease in respondents and more accurate estimates of hours per occurrence that were used in the calculations supporting the prior renewal. The estimated number of respondents reflects Agency review of data collected from ECHO, the Agency’s internal database of information collection responses from the pulp and paper industry, and current permits for identified facilities. The hours to read and understand rule requirements were decreased for this renewal, especial since the prior renewal supported rule amendments. There is also a decrease in the Capital/Startup vs. Operation and Maintenance (O&M) costs due to a decrease in the number of respondents.

**6(g) Burden Statement**

The annual public reporting and recordkeeping burden for this collection of information is estimated to average 79 hours per response. ‘Burden’ means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information either 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, EPA has established a public docket for this ICR under Docket ID Number EPA-HQ-OAR-2022-0077. An electronic version of the public docket is available at [*http://www.regulations.gov/*](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. Due to COVID-19 precautions, entry to the Reading Room is available by appointment only. Please contact personnel in the Reading Room to schedule an appointment. 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-OAR-2022-0077 and OMB Control Number 2060-0387 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 Pulp and Paper Production (40 CFR Part 63, Subpart S) (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- hours per year (E=CxD) | (F)Management person hours per year (Ex0.05) | (G)Clerical person hours per year (Ex0.1) | (H)Cost, $ b |
| 1. Applications | N/A |   |   |   |   |   |   |   |
| 2. Surveys and Studies | N/A |   |   |   |   |   |   |   |
| 3. Reporting Requirements |   |   |   |   |   |   |   |   |
|  A. Read and Understand Rule Requirements d | 4 | 1 | 4 | 104 | 416 | 20.8 | 41.6 | $57,438.16  |
|  B. Required Activities |   |   |   |   |   |   |   |   |
|  1.1) Pulping processes (Non-Sulfite) |   |   |   |   |   |   |   |   |
|  a. Provide documentation that vent streams are introduced to the flame zone of a boiler, lime kiln, or recovery furnace, or c, e | 24 | 1 | 24 | 4 | 96 | 4.8 | 9.6 | $13,254.96  |
|  b. Provide documentation that the control incinerator is operating at a minimum level of 1600 F and 0.75 sec residence time, or c, f | 60 | 1 | 60 | 1 | 60 | 3 | 6 | $8,284.35  |
|  c. Performance test of control device - test method 308 c, f, g, n | 24 | 0 | 0 | 1 | 0 | 0 | 0 | $0.00  |
|  1.2) Pulping Processes (Sulfite) c, g, i, n |   |   |   |   |   |   |   |   |
|  a. Performance test of control device - test method 308 | 24 | 1 | 24 | 1 | 24 | 1 | 2 | $3,313.74  |
|  2.1) Bleaching process vent scrubber c, g, j, n |   |   |   |   |   |   |   |   |
|  a. Performance test of scrubber or control device - test method 26A | 24 | 1 | 24 | 4 | 96 | 4.8 | 9.6 | $13,254.96  |
|  3.1) Pulping wastewater treatment (Non-Sulfite) |   |   |   |   |   |   |   |   |
|  a. Performance test of condensate segregation and control device (test method 305), or c, h, k, n | 24 | 1 | 24 | 4 | 96 | 4.8 | 9.6 | $13,254.96  |
|  b. Performance test of control device - test method 304 c, h, l, n | 24 | 1 | 24 | 3 | 72 | 3.6 | 7.2 | $9,941.22  |
|  3.2) Pulping wastewater treatment (Sulfite) c, h, m, n |   |   |   |   |   |   |   |   |
|  a. Performance test of control device - test method 305 | 24 | 1 | 24 | 1 | 24 | 1.2 | 2.4 | $3,313.74  |
|  4.1) Repeat of performance test (5-yr intervals) g, n, t |   |   |   |   |   |   |   |   |
|  a. Test method 308 - pulping | 24 | 1 | 24 | 6 | 144 | 7.2 | 14.4 | $19,882.44  |
|  b. Test method 26A - bleaching | 24 | 1 | 24 | 30 | 720 | 36 | 72 | $99,412.20  |
|  4.2) Inspection of enclosures, closed vent, wastewater conveyance system o |   |   |   |   |   |   |   |   |
|  a. Initial/Annual inspection - test method 21 | 8 | 1 | 8 | 67 | 536 | 26.8 | 53.6 | $74,006.86  |
|  b. Monthly visual inspection | 4 | 12 | 48 | 101 | 4,848 | 242.4 | 484.8 | $669,375.48  |
| C. Create Information | See 3.B |   |   |   |   |   |   |   |
| D. Gather Information | See 3.B |   |   |   |   |   |   |   |
| E. Report Preparation |   |   |   |   |   |   |   |   |
|  1) Initial Notification Report (<45 days after promulgation) c, d | 16 | 1 | 16 | 0 | 0 | 0 | 0 | $0  |
|  2) Notification of Compliance Status c, d | 16 | 1 | 16 | 0 | 0 | 0 | 0 | $0  |
| 3) Initial Compliance Strategy Report c, p | 40 | 1 | 40 | 0 | 0 | 0 | 0 | $0  |
| 4) Compliance Strategy Report Update p | 16 | 1 | 16 | 0 | 0 | 0 | 0 | $0  |
| 5) Semiannual Summary Report d | 16 | 2 | 32 | 104 | 3,328 | 166.4 | 332.8 | $459,505.28  |
| 6) Continuous Monitoring/Exceedance Reports q | 24 | 2 | 48 | 16 | 768 | 38.4 | 76.8 | $106,039.68  |
| 7) Notification of Performance Test (>75 days before test) c, r | 4 | 1 | 4 | 117 | 468 | 23.4 | 46.8 | $64,617.93  |
| 8) Notification of Construction / Reconstruction (>180 days before) c, s | 4 | 1 | 4 | 16 | 64 | 3.2 | 6.4 | $8,836.64  |
| 9) Notification of Actual Startup (<150 days after startup) c, s | 4 | 1 | 4 | 16 | 64 | 3.2 | 6.4 | $8,836.64  |
| 10) Affirmative Defense u | 30 | 1 | 30 | 0 | 0 | 0 | 0 | $0  |
| ***Subtotal for Reporting Requirements*** | ***13,598*** | ***$1,632,569***  |
| 4. Recordkeeping Requirements |   |   |   |   |   |   |   |   |
| A. Read Instructions | See 3.A |   |   |   |   |   |   |   |
| B. Plan Activities | See 3.B |   |   |   |   |   |   |   |
| C. Implement Activities | See 3.B |   |   |   |   |   |   |   |
| D. Develop Record System c, d, v | 40 | 1 | 40 | 0 | 0 | 0 | 0 | $0  |
| E. Record Information |   |   |   |   |   |   |   |   |
| Records of continuous monitoring for operating parameters d | 2 | 52 | 104 | 104 | 10816 | 540.8 | 1081.6 | $1,493,392.16  |
| Records of periodic inspections (monthly visual inspections and annual method 21) d | See 3.B |   |   |   |   |   |   |   |
|  Records of malfunctions d | 2 | 12 | 24 | 104 | 2496 | 124.8 | 249.6 | $344,628.96  |
| F. Personnel Training | N/A |   |   |   |   |   |   |   |
|  G. Time for Audits | 8 | 2 | 16 | 104 | 1664 | 83.2 | 166.4 | $229,752.64  |
| ***Subtotal for Recordkeeping Requirements***  |  | ***17,222*** | ***$2,067,774***  |
| **Total Labor Burden and Costs (rounded) v** |  | ***30,800*** | ***$3,700,000***  |
| **Total Capital and O&M Cost (rounded) v** |  | ***$766,000***  |
| **GRAND TOTAL (rounded) v** |  | ***$4,470,000***  |
|  |  |  |  |  |  |  |  |  |
| **Assumptions:** |  |  |  |  |  |  |  |  |
| a We assume that an average of 104 respondents (101 chemical pulp mills and 3 non-integrated paper mills) will be subject to this rule. We assume that one new source each year will become subject to the rule over the three-year period of the ICR. We also assume that 15% of facilities (16) will rebuild one or more existing process units in a given year. |
| b This ICR uses the following labor rates: Managerial $157.61 ($75.05 + 110%); Technical $123.94 ($59.02 + 110%); and Clerical $62.52 ($29.77 + 110%). These rates are from the United States Department of Labor, Bureau of Labor Statistics, September 2021, “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. |
| c One-time activity. In out years, after initial compliance date, assume that 5% of mills affected as a result of unexplained exceedances. |
| d  All MACT I category mills are affected by this rule. The only MACT III category mills affected by this rule are those bleaching with chlorinated compounds (3 mills). Total number of mills affected by this rule is 101 + 3 = 102. |
| e Approximately 85% of mills use a recovery boiler, power boiler, or lime kiln for control of pulping vents. There are 97 non-sulfite pulping mills. (85% of 97 = 82). Per footnote "c," 5% of 82= 4. |
| f Approximately 15% of mills use incineration for pulping lines (assuming half of these provide acceptable design specs (7), and half conduct performance tests (7)). Per footnote "c", 5% of 7 = 1 |
| g Estimate includes test plan, test report, and parametric monitoring setup. Method 308 tests for pulping lines and method 26A tests for bleaching lines. |
| h Estimate includes test plan, test report, and parametric monitoring setup. Method 304 and 305 are for wastewater streams. |
| i. Assume that 4 sulfite pulping mills will conduct performance tests. Per footnote "c", 5% of 4 = 1 |
| j. 63 MACT I and 3 MACT III category mills have bleaching lines that use chlorinated compounds. Per footnote "c", 5% of 66 = 3 facilities. Per footnote "n", 15% of 3 = 1 facility. 3 + 1 = 4 facilities total. |
| k. Estimated that each kraft mill has one pulping wastewater control device, with 60% of mills using stream strippers (60% of 89 = 53). Per footnote "c," 5% of 53= 3. Per footnote "n", 15% of 3 = 1 facility. 3 + 1 = 4 facilities total. Facilities with steam strippers are assumed to perform initial condensate segregation and performance tests. |
| l. Approximately 40% of kraft mills use biotreatment. (40% of 89 = 36) Per footnote "c," 5% of 36 = 2. Per footnote "n", 15% of 2 = 1 facility. 2 + 1 = 3 facilities total. Facilities with biotreatment control will perform initial performance tests. |
| m. Assume sulfite mills will monitor gas scrubber parameters and use Water-9 Model for emission estimates. |
| n. Assumed that 15% of performance tests are failed and need to be repeated. |
| o. Initial and annual activity. Assumed that EPA is notified each year of the testing. Assumed 2/3 of all MACT I mills have positive pressure points in their vent systems and will have to test using method 21 (2/3 x 101 = 67). Monthly visual inspections are to be conducted by chemical pulp mills (101). |
| p. The requirement for a compliance strategy report is now obsolete (required before 2006 only). |
| q. Assumed that 15% of all affected mills during any one quarter will be required to submit an exceedance report in addition to the summary report. (15% of 104 = 16). |
| r. EPA must be notified of all tests including out-year repeat performance tests and tests conducted at 5-year intervals. |
| s. Assumed 15% of all affected mills conduct construction or reconstruction per year. (15% of 104 = 16). |
| t. Kraft/soda/semichemical mills using compliance options requiring testing (7 mills) are likely to have 3 emission points that would require 5-year repeat testing (LVHC, HVLC, and stripper off gases). Sulfite mills (4) are likely to have 1 emission point to be tested. Total no. M308 tests = [(7 mills x 3 points) + (4 mills x 1 point)] x 1.15 = 29. Annual no. of 5-year repeat M308 tests = 29/5 = 6 tests. Mills bleaching with chlorinated compounds (66 mills) are likely to have two emission points requiring M26A testing. Total no. of M26A tests = (66 x 2) x 1.15 = 152. Annual no. of 5-yr repeat M26A tests = 152/5=30 tests. |
| u. Assumes no affirmative defense review. |
| v  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 Pulp and Paper Production (40 CFR Part 63, Subpart S) (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- hours per year (E=CxD) | (F) Management person hours per year (Ex0.05) | (G) Clerical person hours per year (Ex0.1) | (H) Cost, $ b |
| 1. Applications | N/A |   |   |   |   |   |   |   |
| 2. Surveys and Studies | N/A |   |   |   |   |   |   |   |
| 3. Reporting Requirements |   |   |   |   |   |   |   |   |
|  A. Read and Understand Rule Requirements a | 4 | 1 | 4 | 104 | 416 | 20.8 | 41.6 | $24,432.51  |
|  B. Required Activities |   |   |   |   |   |   |   |   |
|  Initial Performance Tests |   |   |   |   |   |   |   |   |
|  1.1) Pulping processes (Non-Sulfite) |   |   |   |   |   |   |   |   |
|  a. Review documentation that vent streams are introduced to the flame zone of a boiler, lime kiln, or recovery furnace, or c, d | 8 | 1 | 8 | 4 | 32 | 1.6 | 3 | $1,879.42  |
|  b. Review documentation that the control incinerator is operating at a minimum level of 1600 F and 0.75 sec residence time, or c, e | 8 | 1 | 8 | 1 | 8 | 0.4 | 0.8 | $469.86  |
|  c. Review performance test of control device - test method 308 c, e, j | 8 | 1 | 8 | 1 | 8 | 0.4 | 0.8 | $469.86  |
|  1.2) Pulping Processes (Sulfite) c, f, j |   |   |   |   |   |   |   |   |
|  a. Review performance test of control device | 8 | 1 | 8 | 1 | 8 | 0.4 | 0.8 | $469.86  |
|  2.1) Bleaching process vent scrubber c, g, j |   |   |   |   |   |   |   |   |
|  a. Review performance test of scrubber or control device | 8 | 1 | 8 | 4 | 32 | 1.6 | 3.2 | $1,879.42  |
|  3.1) Pulping wastewater treatment (Non-Sulfite) |   |   |   |   |   |   |   |   |
|  a. Review of performance test of condensate segregation and control device, or c, h, j | 8 | 1 | 8 | 4 | 32 | 1.6 | 3.2 | $1,879.42  |
|  b. Review of performance test of biotreatment unit c, i, j | 8 | 1 | 8 | 3 | 24 | 1.2 | 2.4 | $1,409.57  |
|  3.2) Pulping wastewater treatment (Sulfite) c, d, j |   |   |   |   |   |   |   |   |
|  a. Review performance test of control device | 8 | 1 | 8 | 1 | 8 | 0.4 | 0.8 | $469.86  |
|  4.1) Repeat of performance test (5-yr intervals) j, q |   |   |   |   |   |   |   |   |
|  a. Test method 308 - pulping | 8 | 1 | 8 | 6 | 48 | 2.4 | 4.8 | $2,819.14  |
|  b. Test method 26A - bleaching | 8 | 1 | 8 | 30 | 240 | 12 | 24 | $14,095.68  |
|  4.2) Inspection of enclosures, closed vent, wastewater conveyance system k |   |   |   |   |   |   |   |   |
|  a. Initial/Annual inspection - test method 21 | 0 | 1 | 0 | 67 | 0 | 0 | 0 | $0  |
|  b. Monthly visual inspection | 0 | 12 | 0 | 101 | 0 | 0 | 0 | $0  |
| C. Create Information | See 3.B |   |   |   |   |   |   |   |
| D. Gather Information | See 3.B |   |   |   |   |   |   |   |
| E. Report Preparation |   |   |   |   |   |   |   |   |
|  1) Review Initial Notification Report c | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0  |
|  2) Review Notification of Compliance Status c | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0  |
| 3) Review Initial Compliance Strategy Report c, p | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0  |
| 4) Review Compliance Strategy Report Update c, p | 4 | 1 | 4 | 0 | 0 | 0 | 0 | $0  |
| 5) Review Semiannual Summary Report l | 2 | 2 | 4 | 104 | 416 | 20.8 | 41.6 | $24,432.51  |
| 6) Review Continuous Monitoring/Exceedance Reports m | 2 | 2 | 4 | 16 | 64 | 3.2 | 6.4 | $3,758.85  |
| 7) Review Notification of Performance Test c, n | 4 | 1 | 4 | 117 | 468 | 23.4 | 46.8 | $27,486.58  |
| 8) Review Notification of Construction / Reconstruction c, o | 4 | 1 | 4 | 16 | 64 | 3.2 | 6.4 | $3,758.85  |
| 9) Review Notification of Actual Startup c, o | 4 | 1 | 4 | 16 | 64 | 3.2 | 6.4 | $3,758.85  |
| 10) Review Affirmative Defense r | 8 | 1 | 8 | 0 | 0 | 0 | 0 | $0  |
| 4. Recordkeeping Requirements |   |   |   |   |   |   |   |   |
| A. Read Instructions | See 3.A |   |   |   |   |   |   |   |
| B. Plan Activities | See 3.B |   |   |   |   |   |   |   |
| C. Implement Activities | See 3.B |   |   |   |   |   |   |   |
| D. Record Information |   |   |   |   |   |   |   |   |
| Review records of continuous monitoring for operating parameters l | 1 | 1 | 1 | 104 | 104 | 5.2 | 10.4 | $6,108.13  |
|  Review records of malfunctions l | 1 | 1 | 1 | 104 | 104 | 5.2 | 10.4 | $6,108.13  |
| E. Personnel Training | N/A |   |   |   |   |   |   |   |
|  F. Time for Audits | 8 | 2 | 16 | 104 | 1664 | 83.2 | 166.4 | $97,730.05  |
| **TOTAL (rounded) s** |  | **4,370** | **$223,000**  |
|   |
| **Assumptions:** |
| a We assume that an average of 104 respondents (101 chemical pulp mills and 3 non-integrated paper mills) will be subject to this rule. We assume that one new source each year will become subject to the rule over the three-year period of the ICR. We also assume that 15% of facilities (16) will rebuild one or more existing process units in a given year. |
| b This cost is based on the average hourly labor rate as follows: Managerial $70.56 (GS-13, Step 5, $44.10 + 60%); Technical $52.37 (GS-12, Step 1, $32.73 + 60%); and Clerical $28.34 (GS-6, Step 3, $17.17 + 60%). This ICR assumes that Managerial hours are 5 percent of Technical hours, and Clerical hours are 10 percent of Technical hours. These rates are from the Office of Personnel Management (OPM), 2021 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. |
| c One-time activity. After initial compliance date, assume that 5% of mills affected as a result of unexplained exceedances. |
| d Approximately 85% of mills use a recovery boiler, power boiler, or lime kiln for control of pulping vents. There are 97 non-sulfite pulping mills. (85% of 97 = 82). Per footnote "c," 5% of 82= 4. |
| e Approximately 15% of mills use incineration for pulping lines (assuming half of these provide acceptable design specs (7), and half conduct performance tests (7)). Per footnote "c", 5% of 7 = 1 |
| f Assume that 4 sulfite pulping mills will conduct performance tests. Per footnote "c", 5% of 4 = 1 |
| g 63 MACT I and 3 MACT III category mills have bleaching lines that use chlorinated compounds. Per footnote "c", 5% of 66 = 3 facilities. Per footnote "n", 15% of 3 = 1 facility. 3 + 1 = 4 facilities total.  |
| h Estimated that each kraft mill has one pulping wastewater control device, with 60% of mills using stream strippers (60% of 89 = 53). Per footnote "c," 5% of 53= 3. Per footnote "n", 15% of 3 = 1 facility. 3 + 1 = 4 facilities total. Facilities with steam strippers are assumed to perform initial condensate segregation and performance tests. |
| i Approximately 40% of kraft mills use biotreatment. (40% of 89 = 36) Per footnote "c," 5% of 36 = 2. Per footnote "n", 15% of 2 = 1 facility. 2 + 1 = 3 facilities total. Facilities with biotreatment control will perform initial performance tests. |
| j Assumed that 15% of performance tests are failed and need to be repeated. |
| k Initial and annual activity. Assumed that EPA is notified each year of the testing. Assumed 2/3 of all MACT I mills have positive pressure points in their vent systems and will have to test using method 21 (2/3 x 101 = 67). Monthly visual inspections are to be conducted by chemical pulp mills (101). |
| l Performed for all affected mills. (104) |
| m Assumed that 15% of all mills during any one quarter will be required to submit an exceedance report in addition to the summary report. (15% of 104 = 16) |
| n EPA must be notified of all tests including out-year repeat performance tests and tests conducted at 5-year intervals. |
| o Assumed 15% of mills conduct construction or reconstruction per year. (15% of 104 = 16) |
| p The requirement for a compliance strategy report is now obsolete (required before 2006 only). |
| q Kraft/soda/semichemical mills using compliance options requiring testing (7 mills) are likely to have 3 emission points that would require 5-year repeat testing (LVHC, HVLC, and stripper off gases). Sulfite mills (4) are likely to have 1 emission point to be tested. Total no. M308 tests = [(7 mills x 3 points) + (4 mills x 1 point)] x 1.15 = 29. Annual no. of 5-year repeat M308 tests = 29/5 = 6 tests. Mills bleaching with chlorinated compounds (66 mills) are likely to have two emission points requiring M26A testing. Total no. of M26A tests = (66 x 2) x 1.15 = 152. Annual no. of 5-yr repeat M26A tests = 152/5=30 tests. |
| r Assumes no affirmative defense review. |
| s Totals have been rounded to 3 significant figures. Figures may not add exactly due to rounding. |