

The EPA Administrator, Andrew R. Wheeler, signed the following notice on 10/09/2020, and EPA is submitting it for publication in the *Federal Register* (FR). While we have taken steps to ensure the accuracy of this Internet version of the rule, it is not the official version of the rule for purposes of compliance. Please refer to the official version in a forthcoming FR publication, which will appear on the Government Printing Office's govinfo website (<https://www.govinfo.gov/app/collection/fr>) and on Regulations.gov (<https://www.regulations.gov>) in Docket No. EPA-HQ-OAR-2014-0741. Once the official version of this document is published in the FR, this version will be removed from the Internet and replaced with a link to the official version.

6560-50-P

## **ENVIRONMENTAL PROTECTION AGENCY**

### **40 CFR Parts 60 and 63**

**[EPA-HQ-OAR-2014-0741; FRL-10015-72-OAR]**

**RIN 2060-AU53**

### **National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semicheical Pulp Mills; Standards of Performance for Kraft Pulp Mill Affected Sources for Which Construction, Reconstruction, or Modification Commenced After May 23, 2013**

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** The U.S. Environmental Protection Agency (EPA) is finalizing amendments to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-alone Semicheical Pulp Mills, and the New Source Performance Standards (NSPS) for Kraft Pulp Mills constructed, reconstructed, or modified after May 23, 2013. The final rule clarifies how to set operating limits for smelt dissolving tank (SDT) scrubbers used at these mills and corrects cross-reference errors in both rules.

**DATES:** This final rule is effective on **[INSERT DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** The EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2014-0741. All documents in the docket are listed on the <https://www.regulations.gov/> website. Although listed, some information is not publicly available, e.g., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through <https://www.regulations.gov/>. Out of an abundance of caution for members of the public and our staff, the EPA Docket Center and Reading Room are closed to the public, with limited exceptions, to reduce the risk of transmitting COVID-19. Our Docket Center staff will continue to provide remote customer service via email, phone, and webform.

**FOR FURTHER INFORMATION CONTACT:** For questions about this final action, contact Dr. Kelley Spence, Sector Policies and Programs Division (E143-03), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone number: (919) 541-3158; fax number: (919) 541-0516; and email address: [spence.kelley@epa.gov](mailto:spence.kelley@epa.gov).

**SUPPLEMENTARY INFORMATION:**

*Preamble acronyms and abbreviations.* We use multiple acronyms and terms in this preamble. While this list may not be exhaustive, to ease the reading of this preamble and for reference purposes, the EPA defines the following terms and acronyms here:

ADI	Applicability Determination Index
CAA	Clean Air Act
CFR	Code of Federal Regulations
CRA	Congressional Review Act
EPA	U.S. Environmental Protection Agency
ESP	electrostatic precipitator
HAP	hazardous air pollutant(s)

NAICS	North American Industry Classification System
NESHAP	national emission standards for hazardous air pollutants
NSPS	new source performance standards
NTTAA	National Technology Transfer and Advancement Act
OMB	Office of Management and Budget
PFLA	percent full load amperage
PM	particulate matter
PRA	Paperwork Reduction Act
RFA	Regulatory Flexibility Act
RPM	revolutions per minute
SDT	smelt dissolving tank
UMRA	Unfunded Mandates Reform Act

*Background information.* On October 31, 2019, the EPA proposed revisions to the NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills (40 CFR part 63, subpart MM) and the NSPS for Kraft Pulp Mills Constructed, Reconstructed, or Modified After May 23, 2013 (40 CFR part 60, subpart BBa) clarifying how to set operating limits for SDT scrubbers used at these mills and correcting cross-reference errors in both rules. The rules have similar requirements for setting operating limits for SDT scrubbers, therefore, similar revisions were proposed for both rules. See 84 FR 58356. In this action, the EPA is finalizing the proposed revisions with minor edits. The preamble includes a summary of the comments the EPA received and our responses resulting in improvements to the proposed rule. A summary of all public comments on the proposal and the EPA's specific responses to those comments is provided in the memorandum, "*Response to Comments to Proposed Rule Amending 40 CFR Part 63 Subpart MM and 40 CFR Part 60 Subpart BBa,*" included in the docket for this action. Redline versions of the regulatory language for 40 CFR part 63, subpart MM, and 40 CFR part 60, subpart BBa showing the final amendments resulting from this action and are also available in the docket.

*Organization of this document.* The information in this preamble is organized as follows:

This document is a prepublication version, signed by EPA Administrator, Andrew R. Wheeler on 10/09/2020. We have taken steps to ensure the accuracy of this version, but it is not the official version.

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**I. General Information**

*A. Does this action apply to me?*

Table 1 of this preamble lists the NESHAP, NSPS, and associated regulated industrial source categories that are the subject of this final rule. Table 1 is not intended to be exhaustive, but rather provides a guide for readers regarding the entities that this final action is likely to affect. The final amendments, once promulgated, will be directly applicable to the affected sources. Federal, state, local, and tribal government entities will not be affected by this action. As defined in the *Initial List of Categories of Sources Under Section 112(c)(1) of the Clean Air Act*

*Amendments of 1990* (see 57 FR 31576, July 16, 1992) and *Documentation for Developing the Initial Source Category List, Final Report* (see EPA-450/3-91-030, July 1992), the Pulp and Paper Production source category is any facility engaged in the production of pulp and/or paper. This category includes, but is not limited to, integrated mills (where pulp alone or pulp and paper or paperboard are manufactured on-site), non-integrated mills (where paper or paperboard are manufactured, but no pulp is manufactured on-site), and secondary fiber mills (where waste paper is used as the primary raw material). Examples of pulping methods include kraft, soda, sulfite, semi-chemical, and mechanical. The pulp and paper production process units include operations such as pulping, bleaching, and chemical recovery. A kraft pulp mill is defined as a facility engaged in kraft pulping and includes digester systems, brown stock washer systems, multiple-effect evaporator systems, condensate stripper systems, recovery furnaces, SDTs, and lime kilns.

**TABLE 1. REGULATIONS AND INDUSTRIAL SOURCE CATEGORIES AFFECTED BY THIS FINAL ACTION**

Source Category	Name of Action	NAICS <sup>1</sup> Code
Pulp and Paper Production	Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semicheical Pulp Mills (40 CFR part 63, subpart MM)	32211, 32212, 32213
Kraft Pulp Mills	Standards of Performance for Kraft Pulp Mill Affected Sources for Which Construction, Reconstruction, or Modification Commenced After May 23, 2013 (40 CFR part 60, subpart BBa)	322110

<sup>1</sup> North American Industry Classification System.

*B. Where can I get a copy of this document and other related information?*

In addition to being available in the docket, an electronic copy of this action is available on the Internet. Following signature by the EPA Administrator, the EPA will post a copy of the action at <https://www.epa.gov/stationary-sources-air-pollution/kraft-soda-sulfite-and-stand->

*alone-semichemical-pulp-mills-mact-ii* and <https://www.epa.gov/stationary-sources-air-pollution/kraft-pulp-mills-new-source-performance-standards-nsps-40-cfr-60>. Following publication in the *Federal Register*, the EPA will post the *Federal Register* version of the final rule at this same website.

### *C. Judicial Review and Administrative Reconsideration*

Under Clean Air Act (CAA) section 307(b)(1), judicial review of this action is available only by filing a petition for review in the United States Court of Appeals for the District of Columbia Circuit (the court) by **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Under CAA section 307(b)(2), the requirements established by this final rule may not be challenged separately in any civil or criminal proceedings brought by the EPA to enforce the requirements.

Section 307(d)(7)(B) of the CAA further provides that only an objection to a rule or procedure which was raised with reasonable specificity during the period for public comment (including any public hearing) may be raised during judicial review. This section also provides a mechanism for the EPA to reconsider the rule if the person raising an objection can demonstrate to the Administrator that it was impracticable to raise such objection within the period for public comment or if the grounds for such objection arose after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule. Any person seeking to make such a demonstration should submit a Petition for Reconsideration to the Office of the Administrator, U.S. Environmental Protection Agency, Room 3000, WJC South Building, 1200 Pennsylvania Ave., NW, Washington, DC 20460, with a copy to both the person(s) listed in the preceding **FOR FURTHER INFORMATION CONTACT** section, and the Associate General Counsel for the Air and Radiation Law Office,

Office of General Counsel (Mail Code 2344A), U.S. Environmental Protection Agency, 1200 Pennsylvania Ave., NW, Washington, DC 20460.

## **II. Final Amendments**

With this action, the EPA is finalizing amendments to the NESHAP for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semicheical Pulp Mills (referred to hereafter as “the NESHAP”) and the NSPS for Kraft Pulp Mills constructed, reconstructed, or modified after May 23, 2013 (referred to hereafter as “the NSPS”). The amendments (referred to hereafter as the “2019 proposed amendments”) were proposed on October 31, 2019 (84 FR 58356) to clarify how to set operating limits for SDT scrubbers used at these mills and correct cross-reference errors in both rules. As explained in this section, clarification was needed to address parameter monitoring issues that arose during implementation of the 2017 amendments to the NESHAP (referred to hereafter as the “2017 NESHAP amendments”) as a result of the Agency's residual risk and technology review. See 82 FR 47328, October 11, 2017.

### *A. What are the final amendments to the NESHAP?*

#### 1. Alternative to Monitoring Pressure Drop for Certain SDT Scrubbers

The 2017 NESHAP amendments added fan amperage<sup>1</sup> to 40 CFR 63.864(e)(10)(iii) as an alternative to monitoring pressure drop for SDT dynamic scrubbers that operate at ambient pressure and low-energy entrainment scrubbers where the fan speed does not vary. Fan amperage was added as an alternative monitoring parameter based on the EPA’s review of alternative monitoring requests for these types of SDT scrubbers available in the EPA’s Applicability Determination Index (ADI) (81 FR 97074, December 30, 2016). In these previously approved

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<sup>1</sup> Fan amperage refers to the amperage delivered to the fan motor.

alternative monitoring requests, the EPA acknowledged that pressure drop is not the best indicator of particulate matter (PM)/hazardous air pollutant (HAP) control device performance when the SDT scrubber is a low-energy entrainment scrubber or a dynamic scrubber that operates near atmospheric pressure. Low-energy entrainment scrubbers use the rotation of the fan blade to shatter the scrubbing liquid into fine droplets, while at the same time accelerating the particles into the airstream. The PM removal efficiency of these scrubbers is a function of the number of liquid droplets produced (to create a large contacting surface area) and the velocity of the PM imparted by the fan blade, which in turn, are functions of the amount of scrubbing liquid introduced and the tip speed of the fan blade. Therefore, the most important parameters to continuously monitor are the scrubbing liquid flow rate and the fan rotational speed (as indicated by the amperage of the fan motor or revolutions per minute (RPM)).

In addition to adding fan amperage as a monitoring parameter, the 2017 NESHAP amendments also specified a method in 40 CFR 63.864(j)(5)(i)(A) for setting the fan motor amperage operating limit, requiring that the minimum fan amperage operating limit be set as the lowest of the 1-hour average fan amperage values associated with each run demonstrating compliance with the applicable emission limit. The intent of establishing the operating limit as the lowest 1-hour average fan amperage was to demonstrate that the scrubber was operating as intended and removing HAP accordingly, because fan amperage values can be correlated with fan speed. This seemed reasonable during the development of the 2017 NESHAP amendments because the fans on these units are constant speed fans and changes in the load to the fan motor (*e.g.*, changes in gas density/pressure or fan belt issues) result in changes in the amperage needed to maintain the constant speed. For example, a scrubber operating without any scrubbing liquid or exhaust gas would pull a certain amount of amperage on the fan motor to maintain a constant

speed. When the exhaust gas and scrubbing liquid are added, the fan motor amperage will increase to maintain that speed. Based on this concept, the basis for the fan motor amperage operating limit in the 2017 NESHAP amendments was that a drop in fan motor amperage below a certain point showed that the motor would no longer turn the fan properly (because, for example, the belt that connects the motor to the fan was slipping or broken), which in turn would mean the scrubber was not operating as well as it was during the emissions performance test.

As facilities began to plan their repeat performance test required by the 2017 NESHAP amendments and determine the appropriate operating parameters, they discovered that the method dictated to set the fan motor amperage did not accurately represent proper scrubber performance and submitted alternative monitoring requests. The alternative monitoring requests that EPA received explained that setting the fan amperage operating limit as outlined in the 2017 NESHAP amendments at 40 CFR 63.864(j)(5)(i)(A) could result in a minimum limit that does not correlate with scrubber emissions-reduction performance and cannot be achieved at all times, leading to deviations of the amperage operating parameter even when the fan is turning as designed and the scrubber is operating properly to achieve the required HAP reduction. More details on these alternative monitoring requests were provided in the memorandum titled, *Smelt Dissolving Tank Scrubber Operating Parameter Review*, in the docket for the 2019 proposed amendments (EPA Docket Item No. EPA-HQ-OAR-2014-0741-0277).

As explained in the preamble to the 2019 proposed amendments, after reviewing how the SDT scrubbers in question operate, the EPA agrees that use of the average fan motor amperage measured during the performance test to establish the fan amperage limit as dictated in 40 CFR 63.864(j)(5)(i)(A) of the 2017 NESHAP amendments can be problematic because it does not necessarily correlate with proper operation of the scrubber. The EPA's intent with adding the fan

motor amperage alternative as part of the 2017 NESHAP amendments was to add regulatory flexibility while ensuring proper scrubber operation, not to arbitrarily set an operating limit that may not be met, even while the SDT scrubber is operating properly. The requirement for determining the fan motor amperage during the performance test to set the minimum limit was included in the 2017 NESHAP amendments (40 CFR part 63, subpart MM) which apply to new and existing sources (see 82 FR 47328, October 11, 2017) and in the NSPS promulgated in 2014 (40 CFR part 60, subpart BBa) which applies to new sources only (see 79 FR 18952, April 4, 2014). The issue was not identified in public comments on either rule but was discovered as existing sources began to implement the 2017 NESHAP amendments.

Upon further review of the EPA's responses to historical alternative monitoring requests included in the ADI, recent requests for alternative monitoring, and other available information, we recognize that the requirement to monitor fan amperage directly and establish a minimum fan amperage limit based on the average amperage measured during the performance test may result in deviations even when the scrubber is properly operating. Some facilities were approved by the EPA to use indicators of fan operation closely related to fan amperage (e.g., RPM) and engineering design considerations when setting the site-specific fan amperage limit indicative of proper scrubber operation. For more details, see the memorandum titled *Smelt Dissolving Tank Scrubber Operating Parameter Review*, in the docket for the 2019 proposed amendments (EPA Docket Item No. EPA-HQ-OAR-2014-0741-0277).

To continue with our original intent to measure scrubber performance with an alternative method in these rules, the EPA proposed this rule to modify the language at 40 CFR 63.864(e)(10)(iii) and (j)(5)(i) to clarify how wet scrubber parameter limits are to be established and that fan amperage or RPM can be used to demonstrate compliance for the SDT scrubbers in

question. Specifically, the EPA proposed to replace 40 CFR 63.864(j)(5)(i)(A) with a requirement to set the minimum scrubbing liquid flow rate operating limit as the lowest of the 1-hour average scrubbing liquid flow rate values associated with each test run demonstrating compliance with the applicable emission limit. This requirement was inadvertently left out of the 2017 NESHAP amendments but was required by other sections of the rule. Additionally, we proposed to add a new subsection, 40 CFR 63.864(j)(5)(i)(B), to clarify how wet scrubber fan amperage operating limits should be established.

The proposed text in 40 CFR 63.864(j)(5)(i)(B) included the same requirement that was previously in the 40 CFR 63.864(j)(5)(i) introductory paragraph, which stated that the scrubber pressure drop operating limit must be set as the lowest of the 1-hour average pressure drop values associated with each test run demonstrating compliance with the applicable emission limit, but also added that for dynamic or low-energy entrainment scrubbers, operating limits could be set using one of three methods specified in paragraphs 40 CFR 63.864(j)(5)(i)(B)(1) through (3).

- In 40 CFR 63.864(j)(5)(i)(B)(1), the EPA proposed to clarify that, for SDT dynamic wet scrubbers operating at ambient pressure or for low-energy entrainment scrubbers where fan speed does not vary, the minimum fan amperage operating limit must be set as the midpoint between the lowest of the 1-hour average fan amperage values associated with each test run demonstrating compliance with the applicable emission limit and the no-load amperage value. Additionally, the proposed regulatory text specified that the no-load amperage value must be determined using manufacturers specifications or by performing a no-load test of the fan motor, and that it must be verified that the scrubber fan is

operating within 5 percent of the design RPM during the emissions performance test. A definition of “no-load fan amperage” was proposed in 40 CFR 63.861.

- In 40 CFR 63.864(j)(5)(i)(B)(2), the EPA proposed to allow use of percent full load amperage (PFLA) to demonstrate compliance and require that the minimum PFLA to the fan motor be set as the percent of full load amperage under no-load, plus 10 percent. Because the no-load value represents the amperage pulled by the motor without a fan belt (*i.e.*, the fan is not engaged), the additional 10 percent was proposed to ensure that the belt has not broken, and the fan is engaged during operation. This new subsection also proposed requiring verification that the scrubber fan is operating within 5 percent of the design RPM during the emissions performance test.
- In 40 CFR 63.864(j)(5)(i)(B)(3), the EPA proposed to allow use of RPM to demonstrate compliance and a requirement that the minimum RPM be set at 95 percent of the design RPM. The EPA also proposed a conforming amendment in 40 CFR 63.867(c)(3)(iii)(C)(1) to incorporate this language.

Commenters on the 2019 proposed amendments supported the proposed methods for setting minimum operating limits in 40 CFR 63.864(j)(5)(i)(B)(1) and (2), except for the requirement to verify that the scrubber fan is operating within 5 percent of the design RPM during the emissions performance test. Commenters strongly opposed the requirement to verify the design RPM for reasons detailed in the response-to-comments memorandum, *Response to Comments to Proposed Rule Amending 40 CFR Part 63 Subpart MM and 40 CFR Part 60 Subpart BBa*, in the docket for this action. In brief, the commenters explained that facilities monitoring fan amperage may not have instrumentation in place to monitor fan RPM and may not have the design RPM value available; that there are safety issues associated with attempting

to obtain a one-time measurement of RPM; and that operating within 5 percent of the design RPM during the emissions performance test is irrelevant if the performance test shows compliance with the PM emission limit and fan amperage (which is proportional to RPM) is monitored. In response to these comments, the requirement to verify that the scrubber fan is operating within 5 percent of the design RPM during the emissions performance test was removed from the final rule. All other requirements in 40 CFR 63.864(j)(5)(i)(B)(1) and (2) were finalized as proposed.

One commenter requested that the EPA modify the proposed definition of “no load fan amperage” by adding the following language to the end of the definition, “or the coupling to a direct drive fan was disconnected.” The phrase was added as requested for the final rule.

Regarding the proposed 40 CFR 63.864(j)(5)(i)(B)(2), a commenter requested clarification on how the minimum PFLA operating limit should be calculated for an SDT scrubber fan and suggested that the EPA present an example PLFA calculation in the preamble to the final rule. In response to this request, we clarified in the final rule that the PFLA is calculated by dividing the no-load amperage value by the highest of the 1-hour average fan amperage values associated with each test run demonstrating compliance with the applicable emission limit in 40 CFR 63.862 multiplied by 100 *and then adding 10 percent* (emphasis added). We are including the following example of how to calculate the minimum PFLA. However, we are not including this equation in the final rule to avoid the need to renumber several subsequent rule equations.

$$\text{Minimum PFLA} = (\text{No-load fan amperage/highest 1-hour average of fan amperages}) \times 100\% + 10\%$$

Where:

- The no-load fan amperage represents the amperage pulled by the fan motor when the fan is operating under no-load determined using manufacturers specifications or by performing a no-load test of the fan motor.
- The highest 1-hour average of fan amperages is the highest of the 1-hour average fan amperage values associated with each test run demonstrating compliance with the applicable emission limit in 40 CFR 63.862.

For example, assume Facility “A” performs a no-load test of their SDT scrubber’s fan motor by running the motor without the fan belt attached. The measured fan amperage during the no-load test is 70 amperage. During a performance test of the SDT scrubber, the highest 1-hour average of the fan amperage values associated with each of the three test runs demonstrating compliance with the applicable emission limit is 179 amperage. Using these two amperage values, Facility A would calculate the PFLA alternative operating parameter limit for their SDT scrubber fan as follows:  $\text{Minimum PFLA} = (70/179) \times 100\% + 10\% = 49\%$

One commenter addressed the proposed 40 CFR 63.864(j)(5)(i)(B)(3), which would require the minimum fan RPM limit to be set as 5 percent lower than the design RPM. The commenter stated that the EPA should revise this requirement to be 5 percent lower than the lowest 1-hour average RPM measured during each test run demonstrating compliance with the applicable emission limit. The commenter explained that a facility could have modified the fan motor such that it is no longer operating at the design RPM, or it could have no documentation of the design RPM, but it is the performance of the scrubber during the stack test that matters. In response to this comment, 40 CFR 63.864(j)(5)(i)(B)(3) was finalized by revising it to require that the minimum RPM be set as 5 percent lower than the lowest 1-hour average RPM associated with each test run demonstrating compliance with the applicable emission limit, as requested.

The EPA agrees that an operating limit based on the lowest 1-hour average RPM measured during each test run (for facilities that measure RPM) is adequate to demonstrate ongoing operation of the SDT scrubber. The 5-percent margin suggested by the commenter will allow for variability. The conforming revisions to 40 CFR 63.867(c)(3)(iii)(C)(1) that acknowledge RPM as an operating parameter for SDT dynamic or low-energy scrubbers were also finalized as proposed.

## 2. Other NESHAP Amendments

In addition to clarifying how to set SDT fan amperage operating limits, the EPA also proposed to correct the following cross-reference errors in the promulgated 40 CFR part 63, subpart MM NESHAP:

- An incorrect paragraph reference in the definition of “modification” in 40 CFR 63.861;
- An incorrect paragraph reference in 40 CFR 63.864(e)(10)(iii), referring to 40 CFR 63.864(e)(3)(i) instead of 40 CFR 63.864(e)(10)(i) as intended;
- Omission of reference to wet scrubber liquid flow rate in 40 CFR 63.864(j)(5) which specifies how to establish operating limits; and
- Incorrect paragraph references in 40 CFR 63.864(j)(1), (3), and (5) which cross-referenced requirements that were proposed (81 FR 97046, December 30, 2016) but not finalized for establishing site-specific electrostatic precipitator (ESP) operating limits for secondary voltage and secondary current (or total secondary power) for each ESP collection field. Instead of finalizing site-specific ESP operating limits, the EPA finalized a requirement to maintain proper operation of the ESP's automatic voltage control (82 FR 47328, October 11, 2017), but inadvertently kept the cross-references to the proposed ESP operating limits in the final rule.

The EPA did not receive any comments on the first three corrections noted above and is finalizing these amendments as proposed.

A comment was received regarding the EPA's proposal to eliminate the reference to 40 CFR 63.864(e)(1) in 40 CFR 63.864(j)(1), (3), and (5) which pertain to determination of operating limits. The commenter stated that the EPA should also eliminate reference to 40 CFR 63.864(e)(2) in these sections because 40 CFR 63.864(e)(2) references 40 CFR 63.864(e)(1). The EPA agrees with the commenter's suggestion and eliminated the cross-reference to 40 CFR 63.864(e)(2) in 40 CFR 63.864(j)(1), (3), and (5) for the final amendments. 40 CFR 63.864(e)(2) specifies parameter monitoring requirements for kraft or soda recovery furnaces or lime kilns using an ESP followed by a wet scrubber. 40 CFR 63.864(e)(2) refers to 40 CFR 63.864(e)(1) to require facilities to maintain proper ESP automatic voltage control and refers to 40 CFR 63.864(e)(10) to require facilities to monitor wet scrubber parameters. While 40 CFR 63.864(j)(1), (3), and (5) no longer reference 40 CFR 63.864(e)(1) and (2), these sections retain the reference to 40 CFR 63.864(e)(10) with respect to wet scrubber operating limits.

*B. What are the final amendments to the NSPS?*

1. Alternative to Monitoring Pressure Drop for Certain SDT Scrubbers

The EPA proposed similar amendments to the fan amperage requirements in the NSPS as discussed in section II.A of this preamble for consistency between the NESHAP and NSPS that apply to the same scrubbers. Specifically, NSPS amendments were proposed for 40 CFR 60.284a(b)(2)(iii), (c)(3)(i), (c)(4), and (d)(4)(ii) and 40 CFR 60.287a(b)(4)(i) to add RPM language. As proposed, 40 CFR 60.284a(c)(4) referred to the procedures for establishing the SDT fan amperage operating limit in the NESHAP (40 CFR 63.864(j)(5)(i)(B)). A commenter requested that 40 CFR 60.284a(c)(4) specify how scrubber fan amperage operating limits should

be set rather than referencing 40 CFR 63.864(j)(5)(i)(B) of the NESHAP (as proposed). The commenter noted that incorporation of the NESHAP reference is inappropriate because it requires the operating parameter limit to be set based on a performance test that demonstrates compliance with the applicable emission limit in 40 CFR 63.862, not 40 CFR 60.282a. In response to this comment, the EPA removed the reference to 40 CFR 63.864(j)(5)(i)(B) in 40 CFR 60.284a(c)(4) and replaced it with specific language describing how to set scrubber fan amperage operating parameter limits. The procedures added to the NSPS in 40 CFR 60.284a(c)(4) are consistent with the procedures specified in the NESHAP. The EPA also added the definition of “no-load fan amperage” to 40 CFR 60.281a because the definition is referenced in the language added in 40 CFR 63.864(j)(5)(i)(B).

## 2. Other NSPS Amendments

The EPA proposed to correct a cross-reference error in the promulgated Kraft Pulp Mills NSPS (40 CFR part 60, subpart BBa). Specifically, the EPA proposed to amend incorrect paragraph references in 40 CFR 60.285a(b)(1) and 60.285a(d)(1) intended to cross-reference the rule’s oxygen correction equation. No comments were received on these changes so the EPA is finalizing these amendments as proposed.

### **III. Summary of Cost, Environmental, and Economic Impacts**

#### *A. What are the affected sources?*

The sources affected by this action are chemical pulp mills that use SDTs equipped with low-energy entrainment scrubbers or dynamic scrubbers that operate near atmospheric pressure. We estimate that there are 54 facilities that utilize these types of scrubbers.

#### *B. What are the air quality impacts?*

There are no air quality impacts associated with the final amendments.

*C. What are the cost impacts?*

No cost impacts are estimated to be associated with this action because the action serves only to provide regulatory clarity. This action reduces the likelihood that facilities will choose to submit site-specific alternative monitoring requests but does not change the scope of any regulatory requirements.

*D. What are the economic impacts?*

There are no economic impacts associated with the final amendments.

*E. What are the benefits?*

Because these final amendments are not considered economically significant, as defined by Executive Order 12866, and because we did not estimate any emission reductions associated with the action, we did not estimate any benefits from reducing emissions.

**IV. Statutory and Executive Order Reviews**

Additional information about these statutes and Executive Orders can be found at <https://www.epa.gov/laws-regulations/laws-and-executive-orders>.

*A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulations and Regulatory Review*

This action is not a significant regulatory action and was, therefore, not submitted to the Office of Management and Budget (OMB) for review.

*B. Executive Order 13771: Reducing Regulations and Controlling Regulatory Costs*

This action is not an Executive Order 13771 regulatory action because this action is not significant under Executive Order 12866.

*C. Paperwork Reduction Act (PRA)*

This action does not impose any new information collection burden under the PRA. OMB has previously approved the information collection activities contained in the existing regulation (40 CFR part 63, subpart MM) and has assigned OMB control number 2060-0377. This action does not change the information collection requirements.

*D. Regulatory Flexibility Act (RFA)*

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. This action will not impose any requirements on small entities. This action does not create any new requirements or burdens, and no costs are associated with this final action.

*E. Unfunded Mandates Reform Act (UMRA)*

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector.

*F. Executive Order 13132: Federalism*

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

*G. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments*

This action does not have tribal implications, as specified in Executive Order 13175. The EPA does not know of any pulp mills owned or operated by Indian tribal governments or located within tribal lands. Thus, Executive Order 13175 does not apply to this action.

*H. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks*

The EPA interprets Executive Order 13045 as applying to those regulatory actions that concern environmental health or safety risks that the EPA has reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2-202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

*I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use*

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

*J. National Technology Transfer and Advancement Act (NTTAA)*

This rulemaking does not involve technical standards.

*K. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*

The EPA believes that this action does **not** have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). This action does not affect the level of protection provided to human health or the environment.

*L. Congressional Review Act (CRA)*

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a “major rule” as defined by U.S.C. 804(2).

**List of Subjects**

*40 CFR Part 60*

Environmental protection, Administrative practice and procedures, Air pollution control, Intergovernmental relations, Monitoring requirements.

*40 CFR Part 63*

Environmental protection, Administrative practice and procedures, Air pollution control, Hazardous substances, Intergovernmental relations, Reporting and recordkeeping requirements.

**Andrew Wheeler,**

*Administrator.*

For the reasons set forth in the preamble, the Environmental Protection Agency amends 40 CFR parts 60 and 63 as follows:

**PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES**

1. The authority citation for part 60 continues to read as follows:

**Authority:** 42 U.S.C. 7401 *et seq.*

**Subpart BBa – Standards of Performance for Kraft Pulp Mill Affected Sources for Which Construction, Reconstruction, or Modification Commenced After May 23, 2013**

2. In §60.281a, add in alphabetical order the definition for “No-load fan amperage” to read as follows:

**§60.281a Definitions.**

\* \* \* \* \*

*No-load fan amperage* means, for the purposes of this subpart, the amperage pulled by the fan motor when the fan is operating under no-load, specifically the amperage value the motor would use if the fan belt was removed or the coupling to a direct drive fan was disconnected.

\* \* \* \* \*

3. In §60.284a, revise paragraphs (b)(2)(iii), (c)(3)(i), (c)(4), and (d)(4)(ii) to read as follows:

**§60.284a Monitoring of emissions and operations.**

\* \* \* \* \*

(b) \* \* \*

(2) \* \* \*

(iii) As an alternative to pressure drop measurement under paragraph (b)(2)(i) of this section, a monitoring device for measurement of fan amperage or revolutions per minute (RPM)

may be used for smelt dissolving tank dynamic scrubbers that operate at ambient pressure or for low-energy entrainment scrubbers where the fan speed does not vary.

\* \* \* \* \*

(c) \* \* \*

(3) \* \* \*

(i) Calculate 12-hour block averages from the recorded measurements of wet scrubber pressure drop (or smelt dissolving tank scrubber fan amperage or RPM) and liquid flow rate (or liquid supply pressure), as applicable.

\* \* \* \* \*

(4) During the initial performance test required in §60.285a, the owner or operator must establish site-specific operating limits for the monitoring parameters in paragraphs (b)(2) through (4) of this section by continuously monitoring the parameters and determining the arithmetic average value of each parameter during the performance test. The arithmetic average of the measured values for the three test runs establishes your minimum site-specific operating limit for each wet scrubber or ESP parameter (except for smelt dissolving tank scrubber fan amperage or RPM). For smelt dissolving tank scrubber fan amperage, set the minimum operating limit using one of the methods in paragraphs (c)(4)(i) or (ii) of this section. For smelt dissolving tank scrubber RPM, the minimum RPM must be set as specified in paragraph (c)(4)(iii) of this section. Multiple performance tests may be conducted to establish a range of parameter values. The owner or operator may establish replacement operating limits for the monitoring parameters during subsequent performance tests using the test methods in §60.285a.

(i) The minimum fan amperage operating limit must be set as the midpoint between the lowest of the 1-hour average fan amperage values associated with each test run demonstrating

compliance with the applicable emission limit in §60.282a and the no-load amperage value. The no-load amperage value must be determined using manufacturers specifications, or by performing a no-load test of the fan motor for each smelt dissolving tank scrubber; or

(ii) The minimum percent full load amperage (PFLA) to the fan motor must be set as the percent of full load amperage under no-load, plus 10 percent. The PFLA is calculated by dividing the no-load amperage value by the highest of the 1-hour average fan amperage values associated with each test run demonstrating compliance with the applicable emission limit in §60.282a multiplied by 100 and then adding 10 percent. The no-load amperage value must be determined using manufacturers specifications, or by performing a no-load test of the fan motor for each smelt dissolving tank scrubber.

(iii) The minimum RPM must be set as 5 percent lower than the lowest 1-hour average RPM associated with each test run demonstrating compliance with the applicable emission limit.

\* \* \* \* \*

(d) \* \* \*

(4) \* \* \*

(ii) All 12-hour block average scrubber pressure drop (or fan amperage or RPM, if used as an alternative under paragraph (b)(2)(iii) of this section) measurements below the minimum site-specific limit established during performance testing during times when BLS or lime mud is fired (as applicable), except during startup and shutdown.

\* \* \* \* \*

4. In §60.285a, revise paragraphs (b)(1) and (d)(1) to read as follows:

**§60.285a Test methods and procedures.**

\* \* \* \* \*

(b) \* \* \*

(1) Method 5 of appendix A-3 of this part must be used to determine the filterable particulate matter concentration. The sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf). Water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. The particulate concentration must be corrected to the appropriate oxygen concentration according to §60.284a(c)(1)(iii).

\* \* \* \* \*

(d) \* \* \*

(1) Method 16 of appendix A-6 of this part must be used to determine the TRS concentration. The TRS concentration must be corrected to the appropriate oxygen concentration using the procedure in §60.284a(c)(1)(iii). The sampling time must be at least 3 hours, but no longer than 6 hours.

\* \* \* \* \*

5. In §60.287a, revise paragraph (b)(4)(i) to read as follows:

**§60.287a Recordkeeping.**

\* \* \* \* \*

(b) \* \* \*

(4) \* \* \*

(i) Records of the pressure drop of the gas stream through the control equipment (or smelt dissolving tank scrubber fan amperage or RPM), and

\* \* \* \* \*

**PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR  
POLLUTANTS FOR SOURCE CATEGORIES**

6. The authority citation for part 63 continues to read as follows:

**Authority:** 42 U.S.C. 7401 *et seq.*

**Subpart MM—National Emission Standards for Hazardous Air Pollutants for Chemical  
Recovery Combustion Sources at Kraft, Soda, Sulfito, and Stand-Alone Semichemical Pulp  
Mills**

7. In §63.861, revise the definition for “Modification” and add in alphabetical order the definition for “No-load fan amperage” to read as follows:

**§63.861 Definitions.**

\* \* \* \* \*

*Modification* means, for the purposes of §63.862(a)(1)(ii)(D)(1), any physical change (excluding any routine part replacement or maintenance) or operational change that is made to the air pollution control device that could result in an increase in PM emissions.

\* \* \* \* \*

*No-load fan amperage* means, for purposes of this subpart, the amperage pulled by the fan motor when the fan is operating under no-load, specifically the amperage value the motor would use if the fan belt was removed or the coupling to a direct drive fan was disconnected.

\* \* \* \* \*

8. In §63.864, revise paragraphs (e)(10)(iii), (j)(1), (3), and (5) to read as follows:

**§63.864 Monitoring requirements.**

\* \* \* \* \*

(e) \* \* \*

(10) \* \* \*

(iii) As an alternative to pressure drop measurement under paragraph (e)(10)(i) of this section, a monitoring device for measurement of fan amperage or fan revolutions per minute (RPM) may be used for smelt dissolving tank dynamic scrubbers that operate at ambient pressure or for low-energy entrainment scrubbers where the fan speed does not vary.

\* \* \* \* \*

(j) \* \* \*

(1) During the initial or periodic performance test required in §63.865, the owner or operator of any affected source or process unit must establish operating limits for the monitoring parameters in paragraphs (e)(10) through (14) of this section, as appropriate; or

\* \* \* \* \*

(3) The owner or operator of an affected source or process unit may establish expanded or replacement operating limits for the monitoring parameters listed in paragraphs (e)(10) through (14) of this section and established in paragraph (j)(1) or (2) of this section during subsequent performance tests using the test methods in §63.865.

\* \* \* \* \*

(5) New, expanded, or replacement operating limits for the monitoring parameter values listed in paragraphs (e)(10) through (14) of this section should be determined as described in paragraphs (j)(5)(i) and (ii) of this section.

(i) The owner or operator of an affected source or process unit that uses a wet scrubber must set minimum operating limits as described in paragraph (j)(5)(i)(A) and (B) of this section.

(A) Set the minimum scrubbing liquid flow rate operating limit as the lowest of the 1-hour average scrubbing liquid flow rate values associated with each test run demonstrating compliance with the applicable emission limit in §63.862.

(B) Set the minimum scrubber pressure drop operating limit as the lowest of the 1-hour average pressure drop values associated with each test run demonstrating compliance with the applicable emission limit in §63.862; or for a smelt dissolving tank dynamic wet scrubber operating at ambient pressure or for low-energy entrainment scrubbers where fan speed does not vary, set the minimum operating limit using one of the methods in paragraph (j)(5)(i)(B)(1) through (3) of this section.

(1) The minimum fan amperage operating limit must be set as the midpoint between the lowest of the 1-hour average fan amperage values associated with each test run demonstrating compliance with the applicable emission limit in §63.862 and the no-load amperage value. The no-load amperage value must be determined using manufacturers specifications, or by performing a no-load test of the fan motor for each smelt dissolving tank scrubber; or

(2) The minimum percent full load amperage (PFLA) to the fan motor must be set as the percent of full load amperage under no-load, plus 10 percent. The PFLA is calculated by dividing the no-load amperage value by the highest of the 1-hour average fan amperage values associated with each test run demonstrating compliance with the applicable emission limit in §63.862 multiplied by 100 and then adding 10 percent. The no-load amperage value must be determined using manufacturers specifications, or by performing a no-load test of the fan motor for each smelt dissolving tank scrubber; or

(3) The minimum RPM must be set as 5 percent lower than the lowest 1-hour average RPM associated with each test run demonstrating compliance with the applicable emission limit.

(ii) [Reserved]

\* \* \* \* \*

9. In §63.867, revise paragraph (c)(3)(iii)(C)(1) to read as follows:

**§63.867 Reporting requirements.**

\* \* \* \* \*

(c) \* \* \*

(3) \* \* \*

(iii) \* \* \*

(C) \* \* \*

(1) The operating limits established during the performance test for scrubbing liquid flow rate and pressure drop across the scrubber (or alternatively, fan amperage or RPM if used for smelt dissolving tank scrubbers).

\* \* \* \* \*