

# **Multi-Pollutant Sector Rule for the Pulp and Paper Industry**

## **Response to Comments Received on Information Collection Request Submitted for OMB Review (Published on December 7, 2010)**

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## Acronyms and Abbreviations

AF&PA	American Forest & Paper Association
BACT	Best available control technology
BLS	Black liquor solids
Btu	British thermal unit(s)
CAA	Clean Air Act
CBI	Confidential business information
CCA	Clean Condensate Alternative
CEMS	Continuous emissions monitoring system
dscf	Dry standard cubic foot (feet)
EPA	U.S. Environmental Protection Agency
FR	<u>Federal Register</u>
GHG	Greenhouse gas
gpm	Gallon(s) per minute
gr	Grain(s)
HAP	Hazardous air pollutant(s)
HCl	Hydrogen chloride
HHV	Higher heating value
hr	Hour(s)
ICR	Information collection request
lb	Pound(s)
MACT	Maximum achievable control technology
MM	Million
NCASI	National Council for Air and Stream Improvement, Inc.
NCG	Noncondensable gas
NEI	National Emissions Inventory
NESHAP	National emissions standards for hazardous air pollutant
NO <sub>x</sub>	Nitrogen oxides
NSPS	New source performance standards
OMB	Office of Management and Budget
PCC	Precipitated calcium carbonate
PM	Particulate matter
PSD	Prevention of Significant Deterioration
RTR	Residual risk and technology review
SARA	Superfund Amendments and Reauthorization Act
SOG	Stripper offgas
SSM	Startup, shutdown, and malfunction
TRI	Toxics Release Inventory
TRS	Total reduced sulfur

## 1.0 Introduction

On December 7, 2010, the U.S. Environmental Protection Agency (EPA) submitted for Office of Management and Budget (OMB) review (75 FR 76005) an information collection request (ICR) for the pulp and paper multi-pollutant sector rule (EPA ICR No. 2393.01). The sector rule includes both the new source performance standards (NSPS) review and the national emission standards for hazardous air pollutants (NESHAP) residual risk and technology review (RTR). The respondents affected by this action are owners/operators of mills that are major sources of hazardous air pollutant (HAP) emissions, as defined in 40 CFR 63.2. These major source mills include:

- Mills that perform chemical wood pulping (kraft, soda, sulfite, or semichemical)
- Mills that perform mechanical, groundwood, secondary fiber, and non-wood pulping
- Mills that perform bleaching
- Mills that manufacture paper or paperboard products

A 30-day comment period (ending January 6, 2011) was provided for the public to submit comments to EPA regarding the new data collection. Two comments were received by EPA regarding the information collection request. (See [www.regulations.gov](http://www.regulations.gov), docket ID no. EPA-HQ-OAR-2007-0544, for the complete comments.) Table 11 lists the names of the commenters, the commenters' affiliations, and the docket item number assigned to each of the comments submitted to EPA.

**Table 1. List of Commenters on OMB Review Version of ICR for Pulp and Paper Sector NSPS and NESHAP Residual Risk and Technology Review**

<b>Docket No. EPA-HQ-OAR- 2007-0544</b>	<b>Date Posted</b>	<b>Commenter Name and Affiliation</b>
0021	12/20/2010	Timothy G. Hunt Senior Director, Air Quality Programs American Forest & Paper Association (AF&PA)
0022	1/6/2011	Stephen E. Woock EHS&S Federal Regulatory Affairs Manager, Weyerhaeuser

This document summarizes the substantive comments received by EPA on the OMB review version of the ICR and presents EPA's response to each of those comments. The comment summaries and responses are grouped by topic in the following sections.

## 2.0 Requirement to Collect Information

### 2.1 *New Source Performance Standards (NSPS)*

**Comment:** Commenter 0021 noted that, in the Federal Register notice for the ICR, EPA asserts that the information being solicited in the industry questionnaire is necessary in order to meet Clean Air Act (CAA) requirements. As the commenter stated in his comments on the draft ICR, EPA substantially overstates what it is required to do under the CAA. According to the commenter, to a significant extent, the questionnaire is directed at obtaining information that would support EPA rulemaking that is not required and that, in the context of the large number of additional CAA requirements being imposed on the industry, should not be undertaken at this time. Thus, the commenter concluded that much of the paperwork burden EPA proposes to impose through this ICR is unnecessary.

Commenter 0021's comments on the draft ICR noted several points as to why NSPS information should not be required. Specifically:

- The commenter noted that review of NSPS is not required of “any such standard if the Administrator determines that such review is not appropriate in light of readily available information on the efficacy of such standard.” [CAA section 111(b)(1)(B)]
- The commenter noted that the existing NSPS require, among other things, collection and incineration of most sources of total reduced sulfur (TRS) compound emissions at kraft pulp mills. According to the commenter, the NSPS thus already require a high level of reduction of TRS. In addition, the commenter noted that the pulp and paper maximum achievable control technology (MACT) standards also require incineration or similarly highly effective means of controlling the organic gas streams from kraft pulp mills, which also contain TRS.
- While particulate control technology has improved since the Kraft Pulp Mill NSPS were promulgated, the commenter noted that EPA, since that time, has also promulgated stringent particulate emission limits in the MACT standards for new pulp mill combustion sources as a surrogate for metallic HAP. According to the commenter, these MACT standards are much lower than the NSPS limits: 0.015 vs. 0.044 grain per dry standard cubic foot (gr/dscf) for recovery furnaces, 0.12 vs. 0.2 pounds per ton of black liquor solids (lb/ton BLS) for smelt dissolving tanks, and 0.01 vs. 0.067 or 0.13 gr/dcsf for lime kilns. Thus, the commenter argued that EPA should conclude that review of the NSPS particulate limits would not be productive.
- As for other pollutants that are emitted by kraft pulp mills but not covered by the Kraft Pulp Mill NSPS, the commenter stated that EPA is under no obligation to add pollutants to those already regulated by the Kraft Pulp Mill NSPS. According to the commenter, nothing in CAA section 111 requires that NSPS cover all pollutants emitted by a source, and EPA has never interpreted it that way. See, e.g., 74 Fed. Reg. 51,950, 51,957 (Oct. 8, 2009) (“The statutory scheme thus provides EPA with significant discretion to determine which pollutant(s) should be regulated under the NSPS. “); *National Lime Ass’n v. EPA*, 627 F.2d 416, 426 (D.C. Cir. 1980) (observing that, while “lime plants were determined to be sources of nitrogen oxides, carbon monoxide and sulfur dioxide as well as particulates, standards of performance were proposed and ultimately promulgated only with respect to particulate matter.”); 70 Fed. Reg. 9706, 9711 (Feb. 28, 2005) (where EPA declined to set nitrogen oxide (NOx) limits for boilers below 100 million British

thermal units per hour (MMBtu/hr) heat input, based on current emission levels, available technologies, and costs). In fact, before expanding the Kraft Pulp Mill NSPS to cover additional pollutants, the commenter argued that EPA would have to justify its departure from its prior decisions about which pollutants the NSPS should cover.

Commenter 0021 disagreed with EPA’s statement that data are either not readily available or outdated for the Agency to conclude that a review of NSPS is not necessary, and that a survey would be an efficient way to obtain the necessary data for review of NSPS Subpart BB. The commenter reiterated the point made previously that the control of sources that contain TRS compounds (and other HAP emissions) was already at a high level for NSPS and only increased with MACT requirements. In addition, the commenter noted that MACT PM limits for new sources are much lower than NSPS limits.

According to commenter 0021, EPA has a great deal of information about emissions of kraft pulping vent gases and emissions from kraft pulp mill chemical recovery systems, as well as the emission controls used for these sources, from the subparts S and MM rulemakings and from the compliance demonstrations and continuous monitoring required by those regulations. While much of the data is submitted to state agencies that are the delegated authority, the commenter noted that EPA can request this information from the state and/or local agencies. In addition, the commenter noted that EPA also has been considering these emissions recently in connection with its ongoing evaluation of residual risk for pulping and chemical recovery sources. The commenter also noted that NCASI publications related to the latest information on kraft pulp mill emissions and configurations are available to EPA and represent the latest research being conducted in our industry. Further, the commenter noted that a large percentage of the data that EPA will receive through this survey will be based on NCASI data. The commenter concluded that EPA could, on the basis of “readily available information,” determine that review of the kraft pulp mill NSPS, or a portion thereof, is not necessary.

**Response:** Three federal emission standards are the subject of the pulp and paper information collection:

<b>Standard</b>	<b>Promulgation date</b>
Standards of Performance for Kraft Pulp Mills (40 CFR part 60, subpart BB)	1978 (reviewed 1986)
National Emission Standards for Hazardous Air Pollutants from the Pulp and Paper Industry (40 CFR part 63, subpart S)	1998
National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semicemical Pulp Mills (40 CFR part 63, subpart MM)	2001

Section 111(b)(1)(B) of the CAA mandates that EPA review and, if appropriate, revise existing NSPS at least every 8 years. Section 112(f)(2) of the CAA directs EPA to conduct risk assessments on each source category subject to maximum achievable control technology (MACT) standards and determine if additional standards are needed to reduce residual risks. Section 112(d)(6) of the CAA requires EPA to review and revise the MACT standards, as necessary, taking into account developments in practices, processes, and control technologies. The section 112(f)(2) residual risk and section 112(d)(6) technology reviews are to be done 8

years after NESHAP promulgation. Thus, all three of the emission standards listed above are due for review according to dates set forth in the CAA. While we understand that the pulp and paper industry is currently facing a large number of additional CAA requirements, EPA cannot base its decisions (whether about issuing a survey or developing a rulemaking) on what other rulemakings are underway for a particular industry, but on what is required under the CAA.

The EPA has entered into a proposed Consent Decree (to address a lawsuit filed by Sierra Club) that would require proposal of the subpart S RTR by June 15, 2011 and final action by December 16, 2011. In addition, EPA has received a notice of intent (NOI) to sue from Californians for Alternatives to Toxics (CATs) and the Center for Biological Diversity (CBD), contending that EPA has failed to review the NSPS for kraft pulp mills within the statutory deadline under CAA section 111(b)(1)(B). The EPA received a petition for rulemaking in January 2009 requesting that EPA revise various NESHAP, including the NESHAP for chemical recovery combustion sources at pulp mills, to make the NESHAP consistent with CAA precedent established in recent judicial rulings. Also, in December 2008, the U.S. Court of Appeals for the D.C. Circuit vacated the startup, shutdown, and malfunction provisions contained in the NESHAP General Provisions that apply to pulp and paper mills. To the extent that these legal actions need to be addressed in the pulp and paper NESHAP, EPA intends to collect the information needed to investigate potential rule revisions at the same time as collecting information for the CAA-required statutory reviews.

In the context of NSPS review, we acknowledge that CAA section 111(b)(1)(B) states that “the Administrator need not review any such standard if the Administrator determines that such review is not appropriate in light of *readily available information* on the efficacy of such standard.” (emphasis added) As discussed below, however, much of the information EPA has available for the pulp and paper industry is nearly 20 years old. At present, EPA is seeking data reflecting the post-MACT and post-effluent guidelines configurations of pulp and paper emission units and air pollution control systems. The EPA is also seeking additional updated information to use in the residual risk and technology review (RTR) regulatory analyses required under CAA sections 112(d) and 112(f)(2). There is considerable overlap in the emission units regulated under NSPS subpart BB and the two NESHAP for the pulp and paper industry. As a matter of administrative efficiency, EPA intends to use a single collection of information to seek updated information for use in the RTR for both NESHAP and in reviewing the NSPS (as required under CAA section 111(b)).

We acknowledge that the industry provided volumes of useful information for purposes of NESHAP development. However, this information used to support the subpart S and MM rulemakings is now outdated and may no longer be representative of the latest post-MACT developments in practices, processes, and control technologies for the pulp and paper industry. (The survey collecting pre-MACT information was sent out in February 1992.) Further, EPA’s Office of Air Quality Planning and Standards (OAQPS) does not receive the results from most compliance demonstrations and continuous monitoring being requested in the ICR (e.g., because these data, if submitted at all, are typically submitted to State agencies delegated authority to administer federal standards). Requesting this information from States would:

- Be more burdensome for EPA because the information obtained would not be in a consistent electronic format (as would the proposed information collection),
- Impose burden on the States, and
- Be unlikely to meet EPA’s court-ordered timeframe for the Subpart S RTR, and

- Ultimately result in data gaps and information of lower practical utility (e.g, because States are not expected to have all of the information requested in the proposed survey).

Section 3a of the supporting statement for the proposed survey explains in greater detail why collection of information from States is not preferred for the pulp and paper sector information collection effort. Section 3a also explains why NCASI publications (a valuable resource for the pulp and paper industry and regulators alike) are not a substitute for the information collection. Furthermore, the preliminary information that EPA has received from some mills recently for its evaluation of residual risk for the subpart S RTR is only a small fraction of the information needed to assess all of the required regulatory reviews. In sum, the information requested relevant to the current (post-MACT) equipment configuration and operation, regulatory alternatives, emissions data, and effectiveness of various control systems at removing HAP is not readily available from other sources. In the absence of an industry data collection, the EPA would be forced to try to obtain permits, compliance reports, and emissions test reports from States; extract information from these reports (which vary in detail); and then to fill data gaps where information is not available from the reports obtained. This process of acquiring and extracting data from existing reports would require more time than an industry data collection, and ultimately would be expected to yield incomplete information. Information collected directly from pulp and paper mills would provide the most timely and complete post-MACT data set with the greatest practical utility for purposes of performing the NSPS and RTR reviews that are due to be completed under CAA sections 111(b) and 112(d) and (f)(2).

The EPA believes that the most appropriate and efficient way to assess the latest technological developments for the pulp and paper industry is to gather updated information through a CAA section 114 ICR. The survey would also reveal if there have been no advances in technologies (as the commenters assert). Information collected directly from pulp and paper mills will have the greatest practical utility for purposes of performing the RTR and NSPS reviews as information from the affected industry will contain the most up-to-date, accurate, and reliable equipment and operational data for each mill. CAA section 114(a) states that the Administrator may require any owner or operator subject to any requirement of this Act to: *(A) Establish and maintain such records; (B) make such reports; (C) install, use, and maintain such monitoring equipment, and use such audit procedures, or methods; (D) sample such emissions (in accordance with such procedures or methods, at such locations, at such intervals, during such periods, and in such manner as the Administrator shall prescribe); (E) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; (F) submit compliance certifications in accordance with section 114(a)(3); and (G) provide such other information as the Administrator may reasonably require.*

We do not wish to prejudge the outcome of our regulatory reviews prior to collecting information upon which to base these reviews. More information will allow us to determine whether a review of NSPS is necessary at this time. The aforementioned NOI asserted that EPA must provide standards for all air pollutants that endanger public health and welfare when reviewing and revising the NSPS for kraft pulp mills. We will not know whether it is prudent to extend the NSPS to additional pollutants until we have collected and reviewed updated information to make definitive determinations.



## 2.2 *National Emissions Standards for Hazardous Air Pollutants (NESHAP)*

**Comment:** Commenter 0021 argued that EPA’s claimed basis for needing information to review and revise NESHAP is overstated. The commenter noted that the Federal Register preamble states that “recent case law and legal petitions suggest the need to review the pulp and paper NESHAP” and claims a need “to make the NESHAP consistent with CAA precedent established in recent judicial rulings.” 75 Fed. Reg. at 35,794. The commenter stated that these statements appear to be in direct conflict with the judicial review and emission standard review provisions Congress has included in the CAA. The commenter noted that, under CAA section 307, NESHAP must be challenged through a petition for review filed in the courts of appeals within 60 days after publication of the rule. According to the commenter, neither the subpart S nor the subpart MM NESHAP was challenged in that manner. The commenter argued that EPA is under no obligation to conform these regulations, which have been in effect for many years, and which pulp and paper mills have relied on in making their compliance expenditures and other capital investments, to principles announced in some cases involving challenges to other NESHAPs. According to the commenter, Congress established a system designed to provide certainty and clarity: anyone objecting to a rule must challenge it within 60 days; otherwise it remains in effect.<sup>1</sup> The commenter stated that there is no provision for continued revision of the MACT standards in Subparts S and MM and argued that those standards are to remain in place unless EPA determines more stringent limits are necessary to avoid unacceptable residual risk under CAA section 112(f), or EPA determines that there have been significant advances in hazardous air pollutant control technology, pursuant to CAA section 112(d)(6).

Commenter 0021 noted that EPA did not directly respond to this comment but instead noted that the Agency was under a Consent Decree for subpart S RTR and “received a petition for rulemaking in January 2009 requesting that EPA revise various NESHAP” including subpart MM. The commenter responded to that petition in July of 2009, making the arguments repeated above, that reopening the MACT rules was both illegal and unnecessary.<sup>2</sup>

**Response:** We acknowledge this comment on the broader legal aspects of EPA’s NESHAP (MACT) and RTR programs. Regardless of how recent case law and legal petitions are ultimately interpreted, EPA’s need for information upon which to base the regulatory actions due to be completed remains. As discussed in Section 2.1 above, the required regulatory actions (the subpart BB NSPS review, subpart S and MM NESHAP technology reviews, and subpart S and MM NESHAP residual risk reviews) are all due to be completed. As a matter of efficiency, EPA intends to use a single collection of information to seek updated information for use in all of these reviews.

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<sup>1</sup> According to commenter 0021, there is a provision allowing challenges later if the challenge is based on grounds that arose after the 60-day period has run that affect the rule’s provisions or how it is implemented. The commenter stated that would allow challenges based on new facts (such as the fact that another rule that the challenged rule relied upon no longer is in effect such as the 2008 SSM case), but not challenges on legal grounds that could have been raised, but were not raised, during the initial 60-day period.

<sup>2</sup> See July 21, 2009 letter from AF&PA, API and ACC to EPA Administrator Lisa Jackson on the petition or rulemaking by NRDC

### 3.0 Facilities Required to Respond

**Comment:** Commenter 0021 noted in comments to the draft ICR that the preamble again glosses over the fact that, even if EPA were required to review existing pulp and paper NESHAP to address prior case law, that would not provide any justification for seeking information from the majority of the estimated 386 mills to which the questionnaire would be directed, since most of those mills are not currently subject to subpart S or MM. The commenter stated that EPA responded by only requiring those facilities that are major or synthetic area sources to complete the survey. However, the commenter believes that only major sources should respond to the survey. According to the commenter, synthetic minor facilities are not subject to MACT rules and do not monitor compliance and, therefore, do not have information to offer on the impact of MACT implementation.

**Response:** With this comment, we believe the commenter is referring to non-integrated mills that only manufacture paper (but not pulp). Mills that do not manufacture pulp are included in the pulp and paper survey because they are part of the subpart S source category for which MACT standards were considered. These mills are included in the survey for RTR purposes. Some of these mills may be true area sources of HAP emissions, and therefore exempt from the pulp and paper survey. Criteria for exemption from the pulp and paper sector survey are as follows:

- The mill is not a major source or synthetic area source of HAP emissions, or
- The mill was not operational in 2009 (and remains closed), or
- The mill does not produce pulp, perform bleaching, or serve as a primary manufacturer of paper or paperboard products.

Upon further consideration, we have eliminated synthetic area sources from inclusion in Part II of the pulp and paper survey. The Part II instructions were revised to indicate that synthetic area sources are not required to complete Part II. However, we maintain that it is appropriate to include synthetic area sources in the scope of Parts I and III of the pulp and paper survey for essentially the same reason that synthetic area sources are included in MACT determination (i.e., because these sources may employ emission-reducing control technologies that are applicable to major sources). We recognize that there are a number of reasons mills can be synthetic area sources (e.g., federally enforceable limitation of production, or inherently low emissions due to the products produced). Nevertheless, the possibility of emission-reducing controls or process changes cannot be ruled out until we explore that possibility as part of a thorough regulatory review process. Furthermore, there is no major-area source applicability cutoff for NSPS, so while synthetic area sources may not be covered under MACT RTR it is possible that these sources could be affected by NSPS revisions.

We recognize that synthetic area sources will not have information relevant to MACT compliance. Unless otherwise specified, these sources should answer “NA” for not applicable or select “NA-synthetic area source” on survey questions related to MACT implementation and compliance options. We have revised the survey instructions to clarify where it is appropriate for synthetic area sources to respond “NA” and we have added menu choices of “NA (synthetic area source)” where appropriate. The instructions have also been revised to state that two survey tabs (*Kraft condensates* and *CCA*) are not applicable synthetic area sources.

## 4.0 Burden of the ICR

**Comment:** Commenter 0021 noted that, in the supporting statement, EPA estimated the average burden for a facility responding to the questionnaire to be 476 hours, or 59 8hour working days (see EPA-HQ-OAR-2007-0544-0002; total hour burden of 183,746 hours for 386 facilities). The commenter noted that the survey is now divided into three parts, with Part I (Subpart S) due within 30 days, Part II (NEI Update) due within 100 days, and Part III (Subpart MM) due within 180 days.

Commenter 0021 stated that, while the proposed approach is an improvement over the draft ICR, this is still a very short timeline for a facility to get clarification on any necessary items that are not understood, collect the information requested (assuming all of the information requested is available), arrange it in a format for inclusion in the spreadsheets, quality-assure the information after entry into the spreadsheets, and get management review of the information to be submitted. The commenter also noted that companies may be having to respond to the ICR during the first part of 2011, which is a time when mill and company personnel who would be involved in responding to the ICR also are responsible for preparing numerous other reports to state and federal authorities (e.g., state annual emission inventories, Title V permit annual compliance reports, SARA Title III reports, etc.). In addition, the commenter noted, by March 31, these facilities are required to report GHG emissions to EPA under a completely new regulatory and reporting structure.

According to commenter 0021, the estimate for Part I alone is 210 hours or 26 eight-hour working days, with only 30 calendar days to respond (see Attachment 2 of Standard Form 81-I Supporting Statement, dated November 16, 2010). The commenter recommended the following adjustments to assist in providing the information necessary, while focusing on the critical information for subpart S in Parts I and II of the survey.

- The commenter noted that, for the Coal- and Oil-Fired Electric Utility Steam Generating Unit ICR, EPA granted a split timeline for companies that had multiple facilities. Due to the short time frame for Part I of the survey, the commenter recommended a similar approach: specifically, 60 percent of a company's facilities respond within 30 days, and all facilities must respond within 45 days.
- If the Agency determines that it will not remove the NSPS data requests from the surveys, the commenter recommended that any continuous emissions monitoring system (CEMS) data or test data that are not required for subpart S may be submitted with Part III of the survey.

In addition, commenter 0022 requested that Part I be extended to 60 days and the survey initiation moved to no sooner than April 2011. The commenter noted that EPA's timeline, especially for the collection of information pertaining to equipment, compliance strategies and emissions under Part I related to the NESHAP Subpart S, is in part driven by a consent decree EPA negotiated with a third party to the exclusion of the pulp and paper industry which contains a June 15, 2011 proposal deadline. The commenter stated that this extremely short deadline is an unreasonable burden to place on our facilities and those of the industry generally. The commenter believes 60 days is a more reasonable period of time to complete that part of the survey. The commenter recommended that EPA provide that amount of time and direct its attention to renegotiating the Subpart S risk and technology review schedule with the third party petitioner if the amount of time the Agency needs is too short to process and evaluate the

information and then prepare a rule proposal. The commenter noted that facilities are facing a significant number of continuing and new compliance and reporting obligations in the early part of 2011. For example, the commenter's pulp mills are working to compile, calculate, organize and report their 2010 greenhouse gas emissions as required under the EPA's Mandatory Greenhouse Gas Reporting rule. This is a new obligation with a March deadline that requires significant additional effort as a first time activity, including gaining access to and learning EPA's online "electronic Greenhouse Gas Reporting tool" (e-GGRT) which became available as of December 15, 2010. The commenter noted that resources at their facilities are simply not available to meet these existing obligations and to provide a thorough, well-developed response to Part I of the survey in early 2011 and within such a short timeframe.

**Response:** We understand the commenters' concerns regarding the timing of the survey. Unfortunately, the deadlines in the consent decree for subpart S RTR dictate the timing for the subpart S portion of the survey (Part I) and the NEI update (Part II). We broke the survey into three phases following the first public comment period on the draft ICR in order to ease the timing burden associated with the survey. While Part I of the survey (Mill Overview and Subpart S Data) would be due after 30 days, we are providing additional time for the industry to complete the remaining parts of the survey: Part II - NEI update (100 days) and Part III - chemical recovery combustion unit data (180 days).

Although we are unable to accommodate a longer response time for all facilities, as part of this second public review, we are providing additional time for companies with multiple facilities as requested. Table 1 in the Survey Overview Document was revised to state:

*"An additional 15 days is provided for up to 40 percent of the mills owned by pulp and paper companies operating multiple (more than two) mills. For example, for a company owning 10 pulp and paper mills, the Part I survey response deadline for 4 of these mills may be extended until 45 days following the date stamped on the Section 114 letter."*

Thus, 60 percent of the Part I responses are due within 30 days and 40 percent are postponed until 45 days for companies with multiple mills.

We also added a footnote to Table 1 in the Survey Overview Document that allows mills subject to Part III of the survey to postpone submittal of criteria air pollutant emission test data and CEMS data until the Part III due date. The footnote states:

*"Mills required to complete Part III may postpone until the deadline for Part III submittal of emissions test data and CEMS data required for the emission units listed in Part I Attachment 1 for the following pollutants: PM, PM2.5, TRS, NOx, SO2, and CO."*

We have also reduced, clarified, or eliminated a number of survey questions as a result of comments on this second public review of the survey. Details on these changes are provided in the sections below.

Revised burden estimates associated with the ICR are included in the supporting statement for OMB approval. The revised burden estimates reflect:

- Changes made in response to this second public review,
- Updated information on the population of facilities affected by the survey, and
- Updated information on the number of mills with pre-existing NEI data.

## 5.0 Power Boiler Information

**Comment:** Commenter 0021 noted that, throughout the ICR, EPA requests information on power boilers and other incineration devices, as these units can be used to treat noncondensable gas (NCG) vents regulated under 40 CFR part 60, subpart BB and 40 CFR part 63, subpart S. While the commenter acknowledged that these units can be part of the compliance approach for these regulations, the commenter does not believe that EPA should collect detailed information related to the fuels and capacities of power boilers under this ICR. The commenter noted that any add-on control information for these units is not necessary since the NCGs are presumed to be destroyed by the boiler (see page 14 of the instructions for Part I of the survey, EPA-HQ-OAR-2007-0544-0003). In addition, the commenter noted that their facilities have recently completed an ICR for the Boiler MACT regulations and that this database contains detailed information for each boiler; therefore, the commenter argued that it should not be requested again in this ICR. The commenter suggested that the information requested be limited to the type of unit used to control NCGs and stripper offgases (SOGs) (boiler, oxidizer, kiln, etc.), if the facility has a back-up control device, and how often the mill has bypassed these control devices due to their unavailability.

**Response:** We reduced the scope of the questions related to power boiler fuel use as a result of comments received during the first public review of the ICR (but retained enough information useful for emissions calculations). The power boiler questions remaining in the pulp and paper survey appear in Part I (*PI Equip detail* tab), and Part II (NEI Update). The EPA is interested in boilers because they contribute to the facility-wide risk at pulp and paper mills. Boilers may also be used as a control device for pulp mill NCGs or SOGs. Further, boilers are one of the larger sources of air pollutants at pulp and paper mills, and information on boilers would aid in understanding mill-wide emissions (and in putting pulp and paper process-related emissions into perspective).

In our response to comments received during the first public review of the ICR, we noted that the scope of the pulp and paper information request for boiler information is more limited than the information requested in the 2008 Boiler MACT survey. We also noted that collection of limited information through the pulp and paper survey would ensure all data were for a consistent (2009) base year, would simplify calculations, and would - most importantly - avoid the time-consuming exercise for EPA to attempt to match the Boiler MACT equipment IDs with the NEI emission unit IDs provided in the pulp and paper survey's NEI update.

In response to comments on this second public review, we are including a form (Boiler MACT Code Lookup.xls) that allows mills to supply the Boiler MACT survey identification codes (Boiler MACT Facility ID and Unit ID) for their boilers. This will allow EPA to readily extract data from the boiler MACT data base for pulp and paper mill boilers and associate these boilers with their corresponding NEI Emission Unit ID codes. We have added two columns to the *PI Equip detail* tab of the pulp and paper survey where mills are given the option to specify their Boiler MACT ID codes. Mills that provide Boiler MACT survey IDs in the initial columns of *PI Equip detail* do not need to complete following portions of *PI Equip detail* for the boilers: year installed, operating hr/yr, emission unit exhaust parameters, combustion modifications/controls, process controls, air pollution controls, fuel-fired equipment, primary fuels, supplemental fuels, or emission unit startup/shutdown. However, these mills are still asked to complete the Subpart BB and Subpart S applicability columns and "equipment

incinerating NCG or SOG” columns for boilers burning pulp mill NCG or SOG. Mills that do not supply boiler MACT survey codes will need to complete the details requested in *PI Equip detail* for their boilers.

We are providing a new file along with Part I, Boiler MACT Code Lookup.xls, for the convenience of mills that wish to supply their Boiler MACT ID codes. This file contains the FacilityID and UnitID codes extracted from the Boiler MACT survey data base for pulp and paper mills (i.e., NAICS 322 mills).

As a result of comments following the current and first public review, boiler information is only requested in the *PI Equip detail* tab. We have further clarified in the Part I survey instructions that boiler information is not sought in the *PI Permit limits* tab.

## 6.0 SSM Data

**Comment:** Members of commenter 0021’s organization understand the need for the Agency to collect startup, shutdown and malfunction (SSM) data in order to develop work practice requirements where numerical limits are not an option. However, the commenter noted that much of the data that are requested are not measured or available to the industry or its individual facilities (i.e., facilities do not conduct performance tests during periods of SSM; facilities only keep track of the number of minutes for each SSM period). The commenter recommended that the Agency form an SSM Workgroup to continue the work from the past 2 years on SSM. The commenter indicated that industry can share what procedures are in place to minimize emissions and what sources are covered by SSM Plans. The commenter would like to have representatives from its members serve on the Workgroup. For this reason, the commenter recommended that all SSM questions be noted as “Optional” in the survey and that an SSM Workgroup be convened to address these issues.

**Response:** We intend to work with pulp and paper industry representatives as part of a workgroup focused on startup/shutdown issues. We believe such a workgroup will be valuable. We are not collecting information on malfunction events. Due to the nature of malfunction events (unpredictable variability) our proposal is likely to be based on policies outlined in previous RTR proposals and further data collection will not be necessary.

## 7.0 Request for Webinar

**Comment:** Commenter 0021 encouraged EPA to host a webinar for facilities in the industry to understand the goal of the survey and identify key instructions to complete the survey. The commenter recommended that this webinar take place as soon as possible, as sites only have 30 days to respond to Part I of the survey under the proposed schedule. The commenter noted that EPA has said it will take approximately 2 weeks to issue the surveys after OMB approval. If at all possible, the commenter recommended that the Agency post blank electronic versions of the survey and instructions on-line and conduct the webinar during this time and prior to facilities receiving surveys, to help expedite the process.

**Response:** EPA intends to host a timely webinar to discuss the pulp and paper survey. Plans for this webinar are under development.



## 8.0 Technical Comments

### 8.1 Survey Instructions

#### 8.1.1 Overall Survey Instructions

**Comment:** The industry wants to assist the agency by providing the best information available. It is noted in many cases, the industry does not collect the data requested and facilities will have engineering estimates in lieu of real data or precise numbers that could provide valuable information to the agency for their analyses. It is the intent of the industry to provide reasonable good faith estimates to the agency. However, the industry does not want the agency to use this information for compliance assessments or confirmation of data submitted in regulatory reports. Therefore, the industry recommends the following language be inserted following Table 1 in Section A of the instructions:

“Note that the information submitted by a facility is not intended for a compliance assessment. If actual data is not available, the facility should provide the best engineering estimates where appropriate.

In addition, it is not the intent of the EPA to use this data to confirm data/information submitted in the facility’s Toxic Release Inventory (TRI) or other regulatory required reports. It is understood that data submitted in this survey could vary due to the nature of the questions.<sup>3</sup>”

AF&PA requests that these paragraphs also be added to the certification statement in Attachment 4.

**Response:** The language suggested has been added to the Part I, II, and III survey instruction documents and the certification form with the exception of the suggested footnote. EPA is interested in emissions reductions achieved by existing technologies regardless if the technologies were designed or installed for the purpose of achieving the reduction.

**Comment:** In several parts of the survey, the agency requests capacity data. In discussions with the agency, it was determined that the best terminology would be to ask for “nominal daily throughput capacity.” The industry defines these values as typical operating rates for the emission unit and can be used by the agency to compare the relative size of the unit. It is recommended that each worksheet of the survey in Excel note in the header this definition: “Nominal Daily Throughput Capacity is defined as the typical operating rate for the emission unit.”

**Response:** We have added the requested terminology to the survey. In addition, we clarified in the survey instruction documents that mills may:

- Use the pulping line nominal capacity (throughput) for all equipment in the pulping line;
- Specify the nominal liquor solids or lime kiln throughput for equipment in the chemical recovery loop, and

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<sup>3</sup> For example, a scrubber may not be designed for HCl control, but provides some incidental control that is noted in the TRI. This information would not be submitted in the Pulp and Paper Survey.

- Use the nominal paper throughput capacity for papermaking equipment.

We are not interested in maximum capacity values for each piece of equipment outside of the constraints of the pulping/papermaking/chemical recovery process within which it is located.

### 8.1.2 Survey Instructions for Part I

**Comment:** The instructions should specifically note that state permit limits are only required if a state limit is more stringent than a federal limit. Suggested language is as follows:

State Limits: The facility only needs to include state permit limits that are more stringent than those limits in federal rules (e.g., PSD Avoidance or BACT limit). Any reference to limits for emissions that are not based on a federally enforceable statute (e.g., based on state only required modeling) should not be included. The facility may also opt to send a pdf copy of their permit with the survey.

**Response:** We have revised the permit limits sections of the Part I and III survey instruction documents, but with language different than suggested by the commenter. EPA is interested in State permit limits that are more stringent than existing Federal limits, as well as certain State limits that may apply for some federally-unregulated emission units. The proposed survey instructions already provided that “*Mass emission rate limits (lb/hr or tpy) are not being requested unless this is the only way in which limits are specified in the permit.*” We expanded on this proposed language as follows:

State Mass-based Limits: Mass emission rate limits (lb/hr or tpy), or limits based on state-only required modeling, are not being requested unless this is the only way in which limits are specified in the permit. The EPA is most interested in state permit limits that are more stringent than those limits in federal rules (e.g., PSD Avoidance or BACT limits).

\* \*

Alternative to submit permit copy: The facility may also opt to send a pdf copy of their permit with the survey. While we would prefer to receive data in the *PIII Permit limits* tab, we will accept a copy of your operating permit (e.g., title V operating permit) instead of the completed *PIII Permit limits* tab. Other complete and up-to-date summaries of permit limits, such as a mill-specific summary of permit limits or compliance matrix, would be acceptable as well.

**Comment:** For Part I of the survey, the facility needs only submit information as it relates to Subpart S. Therefore, any Performance Test or CEMS data need only be submitted with Part I for units that control sources for Subpart S. All other Performance Test and CEMS data for either Subpart MM or NSPS need to be submitted with Part III of the survey due in 180 days.

**Response:** We have added a footnote to Table 1 in the Survey Overview Document to indicate that mills required to complete Part III may postpone submittal of the PM, TRS, NO<sub>x</sub>, SO<sub>2</sub>, and CO emissions test data and/or CEMS data required under Part I until the deadline for submittal of their Part III response. We added a corresponding statement to Section D3 of the Part I instruction document. Finally, for tracking purposes, we added a “yes/no” box to the *PI Emissions test data* tab to ask if the respondent is deferring until Part III submittal of any of the test data required in Part I.

For logistical reasons, mills that are required to complete Part I (but not Part III) must submit all of the emissions test data and CEMS data required under Part I by the Part I deadline. These mills typically have fewer emission units to report than mills required to complete all parts of the survey.

### 8.1.2 Survey Instructions for Part II

**Comment:** AF&PA recommends the following changes in the instruction document:

- Attachment 1: Delete Pulp dryers from Pulp Washing, Thickening, and Storage Equipment as they are list in the Papermaking group.
- Attachment 1: Add Activated Sludge Basins to the Wastewater Treatment System Units
- Attachment 1: Thermal Oxidizers should be listed as 1626-2 rather than 1626-3.
- Attachment 2: Add NCASI Technical Bulletin No. 973 as a reference.

**Response:** All of the above changes were incorporated. Some additional stream-lining changes were made to Part II as well:

- In Part II Attachment 1, we moved the salt cake mix tank to the chemical recovery combustion unit equipment grouping because the salt cake mix tank accepts material from the recovery furnace ESP. Conforming edits were made to the Lookups for P&P survey.xls *P&P Att 1 with SCC* tab and the Attachment 1’s for the Part I and III survey instructions. Salt cake mix tanks will now be reported under Part III (with only the equipment identification and control information required in the *PIII Equip detail* tab of Part III) instead of under Part I.
- The requirement to review/revise the “Emission Process Group” column of the NEI update was eliminated from all portions of Part II (*Inventory and New Inventory* tabs, and Lookups for P&P survey.xls *P&P Att 1 with SCC* and *All 11575 SCC* tabs). EPA can run a data base query to assign descriptive Emission Process Groups based on SCC following receipt of the survey data.
- The instructions were revised to indicate that synthetic area sources are not required to complete Part II of the pulp and paper survey.

## 8.2 *Excel Survey*

### 8.2.1 Overall Excel Survey

**Comment:** It is recommended that each line of data have a “Comments” column to allow a facility to comment on the data supplied.

**Response:** A “comments” column was added to the end of each Part I and III spreadsheet tab.

**Comment:** Throughout the survey the EPA should standardize throughput data to be “nominal daily production capacity.” This terminology is standard to the industry and will provide a better standard to compare facilities.

- Part I of the Survey
  - “Mill” worksheet column AS (pulp), AW, AX & AY (paper/paperboard),
  - “PI Equipment Detail” worksheet column AQ (digester), AS (washing system), AX (knotter, screen, or decker), AZ (evaporator), BC (oxygen delignification), BI- BL (stripper parameters), BW (liquor pond throughput) BX (causticizing equipment),
  - “Pulp prod” worksheet column E (pulp)
  - “Bleaching” worksheet column I
- Part III of the Survey
  - “PIII Equipment detail” worksheet column AY (black liquor solids), BL (spent liquor solids), BQ (smelt or ash production rate), BV (lime)

**Response:** We have revised the terminology as requested and added related instructions to the Part I and III survey instruction documents. We noted in the instruction documents that “nominal daily throughput capacity” represents typical operating rates for the process or emission unit and can be used by the agency to compare the relative size of the unit. Respondents may use the pulping line nominal capacity (throughput) for all equipment in the pulping line. Respondents may specify the nominal liquor solids or lime kiln throughput for equipment in the chemical recovery loop. Likewise, for papermaking equipment respondents may use the nominal paper throughput capacity.

The EPA is interested in capacity values that would be used for estimating emissions. Mills may wish to use target capacity values used in their permit application. This is acceptable assuming the permit application values remain representative (or are adjusted to be representative) of operations in 2009.

We are not interested in maximum capacity values for each piece of equipment outside of the constraints of the pulping/papermaking/chemical recovery process within which it is located. For example, a mill may be able to push 3000 ADTP/day through Unit 1, but this is constrained to 500 ADTP/day by other equipment in the process line. We are only interested in the 500 ADTP/day value.

We expect respondents to use their judgment to provide the most readily available information indicative of the magnitude of production with reasonable specificity (e.g., 1100 ADTP/day, not 1123.45 ADTP/day). This information will be used for estimating emissions and

understanding the relative magnitude of production and how it varies from mill-to-mill across the nation. For example, EPA can determine the relative magnitude of emissions from certain types of pulping systems across the nation if the range of nominal production capacity is known across mills nationwide.

**Comment:** AF&PA members understand the need for the agency to collect Startup, Shutdown and Malfunction (SSM) data in order to develop work practice requirements where numerical limits are not an option. As noted in a previous comment, it is recommended that all SSM questions be noted as “Optional” in the survey and a SSM Workgroup be convened to address these issues.

- Part I
  - “PI Equipment Detail” worksheet columns DN – DT
  - “PI Controls” worksheet columns BG – BQ
- Part III
  - “PIII Equipment Detail” worksheet columns DO – DU

**Response:** The information requested would aid in our understanding of startup and shutdown conditions and the mill-specific nature of these events. It is worthwhile for EPA to know definitively whether the requested startup/shutdown information is available or not. Where available, the information would be useful in evaluating work practices that could apply during startup and shutdown. Where unavailable, mills have the option of entering “UK” for unknown in these columns. If we make the columns optional, as requested by the commenter, then we will not know whether the startup/shutdown information is unknown or simply not provided. Therefore, we are not labeling these columns as optional. Even if only a few mills provide this information, it will still be valuable to our understanding of the startup/shutdown mechanics associated with pulp and paper processes.

**Comment:** For single emission units with multiple release points, the instructions need to clarify how to input data for cases such as:

- Uncontrolled brown stock washers, oxygen delignification systems, paper machines, and wastewater treatment plants will have multiple release points. Is it necessary to list all vents or release points on these systems?
- Other systems may be partially controlled, e.g. bleach plants may not send all hood vents, seal tank vents, and vacuum pump exhausts to a scrubber. The situation would be the same for a tall oil system (i.e., the reactor may have scrubber but the storage and settling tanks are not controlled). The instructions need to clarify how to input this information.
- How should liquor storage tanks, pulp storage tanks, and causticizing system equipment be handled?

**Response:** The instructions for single emission units with multiple release points have been revised in both the Part I and Part III instruction documents. The commenter’s specific questions apply for Part I equipment. If the different release points (vents or stacks) have different controls or different NSPS/NESHAP applicability then respondents will need to list each vent (or group of vents with the same controls) on separate rows. Otherwise, respondents

may group multiple vents together. Additional examples were included in the Part I instructions to cover instances where:

- Different release points (vents or stacks) are uncontrolled, have the same control, and have the same NSPS/NESHAP applicability; and
- An emission unit has some groups of release points (vents or stacks) that are controlled and some that are uncontrolled (or if NSPS/NESHAP applicability varies for different groups of release points).

## 8.2.2 Part I of the Survey (Excel File)

### 8.2.2.1 Mill (Part I)

**Comment:** It is recommended that the question in column AU be deleted: “Is natural gas supply currently available to the mill (e.g., truck delivery or pipeline)?” The availability of natural gas is dependent upon many factors and the availability of a natural gas supply does not necessarily mean the system could support a fuel conversion at the plant. If the facility currently burns natural gas, this information will be provided via other questions in the survey.

**Response:** The column was deleted.

**Comment:** Columns BA through BO request the capacity of the facility to produce several paper grades. However, this approach could lead to the total production by grade to be higher than the total capacity of the facility. (For example, a facility could probably produce the same amount of uncoated free sheet as coated free sheet.) In addition, this is very sensitive information that would be confidential business information (CBI). Therefore, it is recommended that the facility simply indicate if the facility can produce certain paper grades rather than the actual production values.

**Response:** The request for capacity by paper grade was replaced with a question asking mills to select from menu the paper grades produced.

### 8.2.2.2 Equipment Detail (Part I)

**Comment:** In Part I of the survey, the facility should not include either chemical recovery combustion sources (covered by Part III of the survey) or power boilers (covered by Industrial Boiler MACT). However, if these sources are used for the control of gases covered by 40 CFR 63 Subpart S, these units should be listed as control devices. This should be clarified in both the instructions and excel survey files.

**Response:** Reference to chemical recovery combustion sources was eliminated. However, reference to boilers is being retained in the survey. As explained above, mills are now given the option to complete the questions in *PI Equip detail* relevant to boilers or to supply their Boiler MACT ID numbers. Reference to boilers was retained in the instructions for selected

questions for those mills that do not supply Boiler MACT IDs (e.g., mills that did not complete the Boiler MACT survey; or mills making changes to boilers such that the Boiler MACT survey data are no longer accurate).

**Comment:** Columns L-N ask for emission exhaust data. The EPA should clarify if this information is requested before or after the control device. If exhaust streams are combined for more than one source, how should this information be entered into the spreadsheet?

If exhaust from a unit is split into two streams that go to different control devices, what flow rate should be reported in Column L?

**Response:** A column was added for respondents to indicate whether the flow rate provided is at the: inlet to collection system, collection system outlet prior to control device, inlet to control device, control device outlet, or prior to atmospheric release. We did not wish to limit the location from where flow rate data are reported because we recognize that flow rate measurements are infrequent. Either inlet or outlet data will serve our purposes, and the column added will indicate where the data were measured. While we prefer actual measurements (e.g., from stack tests), estimated flow rates are acceptable. Respondents not having flow rate data for a particular emission unit may enter unknown. It is not necessary to estimate flow rates from every emission unit ducted to an LVHC or HVLC system. We recognize that in many cases such flow rates have not been measured and are unknown. Nevertheless, we are interested in flow rate data from any mills that might have this information.

Respondents should follow the instructions for “single emission unit with multiple release points” for emission units that vent through multiple control devices. The emission unit would be reported on two separate rows on the *PI Equip detail* spreadsheet as indicated in the example provided in the instructions.

**Comment:** The reference to boilers should be removed from column P.

**Response:** Reference to boilers in this column was retained in this question asking about combustion modifications. As explained above, mills are now given the option to complete the questions in *PI Equip detail* relevant to boilers or to supply their Boiler MACT ID numbers. Reference to boilers was retained in the instructions for selected questions for those mills that do not supply Boiler MACT IDs (e.g., mills that did not complete the Boiler MACT survey; or mills making changes to boilers such that the Boiler MACT survey data are no longer accurate).

**Comment:** For the information requested in Columns R – T, any reported percentages will be difficult to interpret unless they are based on long term CEMS data both before and after the modifications were made. Short term tests before and after do not provide a meaningful assessment of the performance. If these 3 questions are retained, EPA should ask for the basis of the reported percent reduction.

**Response:** The instruction row was reworded as follows, “Enter percent reduction (if known) and indicate the basis for the value provided (e.g., CEMS data, before-and-after testing, design value).”

**Comment:** For batch digester systems, each equipment source should be listed as in the NEI. If several digesters are included in one source, the survey requests production information for that source and not each individual digester unit. It is recommended that cell AP6 be amended as follows: “Complete for each digester source. This could include multiple emission units that are part of one emission source.”

**Response:** We added the commenter’s suggested language with a reference to the Part I survey instructions for “Multiple emission units ducted to a single release point.” We provided the following exception in the instructions for “Multiple emission units ducted to a single release point:”

*Exception:* If the multiple emission units ducted to a single release point are numerous and identical in design/operation (for example – 20 batch digesters all ducted to LVHC control and processing softwood), then you may lump the emission units together on one row and note their total capacity. Note how many emission units are lumped together in the “Emission unit description” column (e.g., digester (20 units))

**Comment:** EPA also requests information for process tanks. Some tanks can be used for different materials. Therefore, EPA should request in Column BP for the typical tank contents as one tank could hold a variety of products.

**Response:** “Typical” tanks contents are now requested.

**Comment:** EPA has received detailed information on boilers in the Boiler MACT ICR. The questions of importance for this ICR include the type of control device for NCGs, if a back-up control device is available, and the number of main vent minutes due to control device downtime. All other information is not applicable to this ICR and AF&PA recommends that these questions be removed (columns CB, CE – DM). Emissions from these units will be submitted in the NEI section (Part II) of the survey.

**Response:** We are retaining these questions for boilers and other fuel-fired equipment, but have made them optional for mills that supply their Boiler MACT ID numbers in *PI Equip detail*. Fuel types and MMBtu/hr heat input capacity are a key component of emissions calculations for fuel-fired equipment. Column CB of the proposed survey requests design heat input capacity (MMBtu/hr) for fuel-fired equipment. Columns CE through DM of the proposed survey request details on:

- Primary fuels for fuel-fired equipment (except black or red liquor), and
- Supplemental or other fuels for fuel-fired equipment

For primary fuels, the fuel type and approximate percentage of annual heat input capacity for the fuel are requested, along with optional questions for heating value and biomass moisture percentage. For supplemental fuels, the fuel type, approximate percentage of annual heat input



capacity, and conditions when the supplemental fuel are used are requested, along with an optional question for fuel heating value.

Emissions from boilers will be submitted with the NEI, but basic process details such as MMBtu/hr heat input capacity and primary/supplemental fuel types are not part of the NEI inventory data request. If Boiler MACT IDs are provided, EPA can consult the Boiler MACT data base for information on fuel types and amounts fired. Otherwise, respondents are asked to supply the fuel-firing information for boilers in the *PI Equip detail* tab.

**Comment:** Please note if the following data should be the average from 2009 or target values:

- Column AW: Vacuum drum shower water methanol concentration
- Column BE: Oxygen delignification shower water methanol concentration
- Column BN: Methanol removal efficiency
- Column BO: TRS removal efficiency
- Column BW: Liquor pond throughput

**Response:** “Use the average from 2009 or target value,” was added to the instruction row for these columns. Respondents should use their discretion and provide the most readily available value.

### 8.2.2.3 Controls (Part I)

**Comment:** Please note if the following data should be the average from 2009 or target values:

- Column W: Sorbent injection rate (lb/hr)
- Column AH: Water flow through the WESP (gpm)
- Columns AJ – AL: Scrubber rates
- Columns AS-AT: Water source data
- Columns AX and BB: Solid waste material generation

**Response:** “Use the average from 2009 or a target value,” was added to the instruction row for these columns. Respondents should use their discretion and provide the most readily available value.

### 8.2.2.4 Byproducts

**Comment:** For columns C, D, F, K and L, is the turpentine production data requested based on 2009 actual data or nominal daily production capacity?

**Response:** As noted in previous public comments on the survey, turpentine production can fluctuate seasonally so an annual average is more meaningful. We inserted the words “based on nominal production capacity” into the instruction row for columns C, D, F, K and L. Again, we expect respondents to use their judgment and supply to most readily available estimate of

byproduct production. We are interested in understanding the relative magnitude of byproduct production from mill to mill (e.g., 5000 gallons vs. 5 million gallons).

#### 8.2.2.5 Kraft Condensates

**Comment:** Additional options need to be added to the survey and/or instructions for the following situations:

- It should be noted that some mills implemented an “Equivalency by Permit” project for compliance with Subpart S. For this reason, the facility may not collect a specific named stream and would have implemented an “equivalent” project. If this is the case, the instructions should note that the named stream would be input into Column C and an explanation of the treatment option would be described in Column R.
- Another control option listed in 40 CFR §63.446(c)(1), is for the facility to collect all named streams. This should be added to the instructions table and as an option in the survey spreadsheet in Column F.
- In complying with the collection and treatment requirements, a facility will look at total condensate loads, not loads from individual digesters or evaporator lines. Furthermore, there are multiple condensate streams from digesters and evaporators, and usually only a portion of the total is collected for treatment. Therefore, a simply “Yes” or “No” to the question in Column E is not appropriate. (Is condensate stream collected and treated according to Subpart S.” It is recommended that the survey and instructions direct facilities to indicate “Yes” to this question if all or a portion of the stream is collected. The facility would then include comments in the “Comments” column EPA will add to each worksheet.

**Response:** We have revamped the *Kraft condensates* tab to account for the above comments. We replaced the blank rows for each named condensate-producing emission unit with pull down menus in column C where respondents can select:

- The source of each "named" kraft condensate stream (digester, turpentine recovery, evaporator, HVLC, or LVHC systems),
- “Combined systems” to describe combined condensate streams from multiple "named" sources (e.g., combined digester and evaporator condensates), or
- "Other systems" to describe condensate streams that are un-named (i.e., not listed in §63.446(b)) but are controlled to meet subpart S as part of an innovative or equivalency-by-permit project.

In column F, we added equivalency-by-permit as a pull-down menu option. We also revised the menu choices in column E to account for the possibility of partial collection and control.

#### 8.2.2.6 Clean Condensate Alternative (CCA)

**Comment:** The instructions should note that wastewater treatment is another CCA eligible source. In addition, “Equivalency by Permit” facilities may have other credit generating sources.

**Response:** The spreadsheet was revised to state, “Sources eligible for inclusion in the CCA as credit generators include (*but are not limited to*): pulping systems, bleaching systems, causticizing systems, papermaking systems, and *wastewater treatment systems.*” Corresponding edits were made to the Part I instruction document.

In addition, the column entitled “Emission reductions expected through compliance with the kraft pulping system standards (kg total HAP/Mg ODP)” was removed to address comments included in the spreadsheet.

#### 8.2.2.7 Bleaching

**Comment:** Is column H asking for 2009 data or nominal production capacity?

**Response:** The column was revised to request “2009 nominal daily bleached production capacity, ADTBP/d.”

#### 8.2.2.8 HAP Additives

**Comment:** Column E should be clarified to ask for 2009 actual data.

**Response:** The column was revised to ask for “Amount of additive used in 2009.”

#### 8.2.2.9 Wastewater

**Comment:** The survey asks for the capacity of the WWTP in MMgal/day. AF&PA recommends that this be changed to ask for the average daily throughput in 2009 as these systems are large and the “capacity” is dependent upon the load and retention time.

**Response:** As requested, the column heading was changed to “WWTP throughput, MMgal/day.” Respondents are now instructed to enter the 2009 average daily throughput of the wastewater treatment plant (million gallons per day).

**Comment:** Columns J – P request the percent volume of condensate from specific processes relative to the overall wastewater flow. In many cases, the facility will not have this information. If the facility treats condensates via the hard pipe option, the facility will have data on the total volume of condensates relative to the entire wastewater flow. For those facilities that do not have a hard pipe or for other systems, the data may not be available. Most facilities will not have an estimate for stormwater contribution.

**Response:** Reference to stormwater was removed. “If known” was added to each column heading. Instructions were added to the instruction document to clarify that mills may respond “UK” if the volume percentages are unknown.

In addition to the changes above, three columns were added to the survey spreadsheet to address outsourced wastewater treatment. These questions ask if a mill outsources wastewater treatment to a publicly owned treatment works (POTW) or other separate entity such as a privately held entity that may be owned and operated by the same company or a different company. The questions clarify that only mills performing onsite wastewater treatment beyond operation of a clarifier for suspended solids removal are required to complete the remainder of the *WW* tab.

### 8.2.3 Part II of the Survey (Excel File)

**Comment:** In terms of the release angle, the instructions need to note that this angle is relative to the width of the source (Columns BA and BI).

**Response:** The following comment was added to the columns in *P&P NEI update.xls* and *P&P NEI blank.xls*: “Note that the fugitive angle is relative to the width of the emission unit. See instructions for details.”

### 8.2.4 Part III of the Survey (Excel File)

#### 8.2.4.1 Equipment Details (Part III)

**Comment:** Columns M-O ask for emission exhaust data. The EPA should clarify if this information is requested before or after the control device. If exhaust streams are combined for more than one source, how should this information be entered into the spreadsheet?

If exhaust from a unit is split into two streams that go to different control devices, what flow rate should be reported in Column M?

**Response:** A column was added for respondents to indicate whether the flow rate provided is at the: inlet to collection system, collection system outlet prior to control device, inlet to control device, control device outlet, or prior to atmospheric release. We did not wish to limit the location from where flow rate data are reported because we recognize that flow rate measurements are infrequent. Either inlet or outlet data will serve our purposes, and the column added will indicate where the data were measured. While we prefer actual measurements (e.g., from stack tests), estimated flow rates are acceptable. Respondents not having flow rate data for a particular emission unit may enter unknown.

Respondents should follow the instructions for “single emission unit with multiple release points” for emission units that vent through multiple control devices. The emission unit would be reported on two separate rows on the *Equip detail* spreadsheet as indicated in the example provided in the instructions.

**Comment:** The reference to boilers should be removed from column Q.

**Response:** The reference to boilers was removed.

**Comment:** For the information requested in Columns S – U, any reported percentages will be difficult to interpret unless they are based on long term CEMS data both before and after the modifications were made. Short term tests before and after do not provide a meaningful assessment of the performance. If these 3 questions are retained, EPA should ask for the basis of the reported percent reduction.

**Response:** The instruction row was reworded as follows, “Enter percent reduction (if known) and indicate the basis for the value provided (e.g., CEMS data, before-and-after testing, design value).”

**Comment:** For sources covered by Part III, process equipment will not be used for controls. It is suggested that these references be removed for Columns Y, AA, and AC.

**Response:** The references were removed.

**Comment:** The following references are not required for Part III of the survey:

- o Cell AE6 – Parenthetical expression
- o Cell AG15 – collects emissions from BB emission units
- o Cells AI11 – AI16 – these options are not related to Part III sources
- o Column AI – add 0.0168 lb/ton BLS as some sources still have the old NSPS limit on their smelt tank (changed in 1986 to 0.033 lb/ton BLS).
- o Remove column AJ as a back-up device is not relevant to Part III sources.

**Response:** All of these corrections were made.

**Comment:** Please note if the following data should be the average or target values:

- o Column AS: Liquor flow rate
- o Column AT: Liquor solids content
- o Columns AZ – BD: Black liquor solids characteristics
- o Column BM: Spent liquor solids HHV
- o Column BS – BT: Black liquor content
- o Columns BW – BY: Lime Mud and Kiln characteristics

**Response:** “Use the average from 2009 or target value,” was added to the instruction row for these columns. Respondents should use their discretion and provide the most readily available value.

**Comment:** Column CG, CL, CQ, CV, DA, DF, DK: Should the breakdown of fuel usage as % of total input be based on 2009 actual data or target fuel use?

**Response:** These columns request the approximate percent of annual heat input capacity (MMBtu/yr) supplied by each primary and supplemental fuel. The spreadsheet instructions for these columns already indicated that, “*Approximations will suffice.*” These instructions were expanded to state, “*Approximations based on the average from 2009 or a target value will suffice.*” Corresponding changes were made to these same columns in the Part I spreadsheet. Respondents should use their discretion and provide the most readily available value.

**Comment:** Part III is for Subpart MM sources and therefore fuel-fired equipment should be limited to recovery furnaces, semi-chemical combustors, and lime kilns. Any references to other equipment should be deleted.

**Response:** The spreadsheet instructions have been revised to clarify that recovery furnaces, semi-chemical combustors, and lime kilns are the focus of the questions pertaining to fuel-fired equipment, primary fuels, and supplemental fuels under Part III. These types of emission units are used as examples of fuel-fired units in the instructions so no uncommon or unconventional types of chemical recovery combustion sources will be excluded.

Total heat input capacity (MMBtu/hr) for all fuels including spent pulping liquor is requested in the “fuel-fired equipment” column. The primary fuel questions apply for lime kilns, but do not apply for spent pulping liquors since there are separate questions in *Part III Equip detail* asking for spent pulping liquor capacity. The supplemental fuel columns are to be completed for recovery furnaces, semi-chemical liquor combustors, and lime kilns.

Thermal oxidizers (e.g., regenerative thermal oxidizers) may be used to control semi-chemical combustion units. Thermal oxidizers controlling Part III emission sources are not to be included as emission units in the *Part III Equip detail* tab, but will be identified as controls and included in the *Part III Controls* tab. Questions pertaining to fuel use by thermal oxidizers treating chemical recovery combustion source emissions were moved to *Part III Controls*. (Note that treatment of thermal oxidizers under Part III is different than under Part I where thermal oxidizers are to be listed as both an emission source in *PI Equip detail* and as a control device in *PI Controls*. This is because Part I thermal oxidizers sometimes have a pollution control device for SO<sub>2</sub> generated from burning pulp mill vent gas TRS emissions.)

#### **8.2.4.2 Permit Limits (Part III)**

**Comment:** AF&PA recommends adding sulfuric acid mist and replacing chlorine and chlorinated HAP with HCl in Column E (Pollutant list).

**Response:** These changes were made for the *PIII Permit Limits* tab.

**Comment:** For the responses in Column F, EPA should remove Subpart S, Subpart Db, and Dc. It should be noted that Subpart BB has two possible TRS emission limits for smelt dissolving tanks.

**Response:** These changes were made in the *PIII Permit Limits* tab. We added pull-down menu options for the different NSPS subpart BB years (associated with different applicable emissions limits).

#### 8.2.4.3 Controls (Part III)

**Comment:** As Part III sources do not have back-up controls, the instruction in Column D should be eliminated. In addition, the following survey requests require clarification:

- o Column W: Sorbent injection rate (lb/hr)
- o Column AH: Water flow through the WESP (gpm)
- o Columns AJ – AL: Scrubber rates
- o Columns AS-AT: Water source data
- o Columns AX and BB: Solid waste material generation

**Response:** Reference to backup controls was removed. “Use the average from 2009 or a target value,” was added to the instruction row for these columns. Respondents should use their discretion and provide the most readily available value.

**Comment:** This part of the survey requests data on thermal oxidizers and incinerators (column O – T). This information is requested in Part I of the survey and should be eliminated in Part III.

**Response:** These questions were not eliminated because thermal oxidizers may be used to control emissions from semi-chemical combustion units. Instead, questions pertaining to fuel use by thermal oxidizers treating chemical recovery combustion source emissions were moved from *PIII Equip detail* to *Part III Controls* so Part III thermal oxidizers are treated as control devices only (and need not be listed as a separate emissions source in *PIII Equip detail*.)

#### 8.2.4.1 Precipitated Calcium Carbonate (PCC)

**Comment:** Please clarify if the answers to Columns F and G are based on 2009 data or target data.

**Response:** “Use the average from 2009 or a target value,” was added to the instruction row for these columns. Respondents should use their discretion and provide the most readily available value.