

BEFORE THE ADMINISTRATOR

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of the Proposed Revised Operating

Permit for the LOUISIANA PACIFIC

CORPORATION facility in Tomahawk,

Wisconsin.

I.D. No. 735057950

Revised Permit No. 735057950-P10

Proposed by the Wisconsin Department of Natural

Resources

PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT TO ISSUANCE OF THE PROPOSED REVISED TITLE V OPERATING PERMIT FOR THE LOUISIANA PACIFIC FACILITY IN TOMAHAWK, WISCONSIN.

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Pursuant to Clean Air Act § 505(b)(2) and 40 CFR § 70.8(d), the Sierra Club hereby petitions the Administrator ("the Administrator") of the United States Environmental Protection Agency ("U.S. EPA") to object to proposed Title V Operating Permit for the Louisiana Pacific Corporation facility in Tomahawk, Wisconsin (hereinafter "Permit). A copy of the Permit is attached as Exhibit A. The permit was proposed to U.S. EPA by the Wisconsin Department of Natural Resources (hereinafter "DNR") more than 45 days ago. Sierra Club provided comments to the Wisconsin Department of Natural Resources on the draft permit. A true and accurate copy of Sierra Club's written comments is attached at Exhibit B. DNR's response to comments is attached as Ex. C.

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This petition is filed within sixty days following the end of U.S. EPA's 45-day review period as required by Clean Air Act § 505(b)(2). The Administrator must grant or deny this petition within sixty days after it is filed.

If the U.S. EPA Administrator determines that this permit does not comply with the requirements of the Clean Air Act ("CAA") or 40 C.F.R. Part 70, he must object to issuance of the permit. See 40 C.F.R. § 70.8(c)(1) ("The [U.S. EPA] Administrator will object to the issuance of any permit determined by the Administrator not to be in compliance with applicable requirements or requirements of this part."). "Applicable requirements" include, *inter alia*, any provision of the Wisconsin State Implementation Plan ("SIP"), any term or condition of any preconstruction permit, any standard or requirement under Clean Air Act sections 111, 112, 114(a)(3), or 504, acid rain program requirements. 40 C.F.R. § 70.2. The Administrator must object to the Louisiana Pacific permit because the Permit fails to comply with the applicable requirements. 42 U.S.C. § 7661d(b); 40 C.F.R. § 70.8(d); New York Public Interest Research Group v. Whitman, 321 F.3d 316, 333 n.11 (2nd Cir. 2002).

1. The Permit Fails to Require Sufficient Monitoring for Visible Emissions.

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Visible emissions from the Louisiana-Pacific facility are regulated by both the general visible emission limits in NR 431¹ and specific New Source Performance Standard ("NSPS") limits in NR 440. Both applicable limits require that visible emissions not exceed 20% opacity. The Wisconsin State Implementation Plan (SIP) requires one of two methods for monitoring compliance with opacity limits:

- 1. Method 9 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04 (13); or
- 2. Install, calibrate, maintain and operate a continuous emission monitor that meets the applicable performance specifications in 40 CFR part 60, Appendix B or 40 CFR part 75, Appendices A to I, incorporated by reference in s. NR 484.04 (21) and (27), and follow a quality control and quality assurance plan for the monitor which has been approved by the department.

Wis. Admin. Code § NR 439.06(9)(a); 40 C.F.R. § 52.2570(c)(98)(i). One of these two monitoring options must be used. The Permit, however, fails to require one of these two monitoring options for processes P05, P06 and P41 and boiler B09. See Permit (Exhibit A) at §§ I.D.2.b., I.D.2.b., and I.F.2.b. Instead, the permit relies on compliance with the particulate matter standards to show compliance with the visible emission standard. Id. This violates Wisconsin's SIP, which requires either Method 9 or continuous monitors. Wis. Admin. Code § NR 439.06(9)(a). This error by DNR results in a deficient permit because the Permit does not contain the required monitoring. Therefore, the Administrator is required to object to the Permit. 42 U.S.C. § 7661d(b)(2) ("The Administrator shall issue an objection with such period if the petition demonstrated to the Administrator that the permit is not in compliance with [the Clean Air Act], including the requirements of the applicable implementation plan."). 40 C.F.R. § 70.2 (a SIP requirement is an "applicable requirement" under CAA Title V).

Even if the SIP allowed DNR to waive the requirement to use one of the two visible emission monitoring options in NR 439.06(9)(a), DNR has failed to explain how the monitoring required for PM ensures compliance with the visible emission standards. DNR's statement of basis fails to adequately "set forth the legal and factual basis for the draft [or final] permit

¹ The visible emission limits in NR 431 are incorporated into the SIP as former code section NR 154.11(6). See <u>United States v. Murphy Oil USA</u>, Inc., 143 F.Supp.2d 1054, 1100 (W.D.Wis. 2001).

conditions." 40 C.F.R. § 70.7(a)(5). DNR's statement of basis (called an "Analysis and Preliminary Determination" in Wisconsin) must "include a discussion of the decision making that went into the development of the title V permit and provide the permitting authority, the public, and EPA a record of the applicability and technical issues surrounding the issuance of the permit." In the Matter of Los Medanos Energy Ctr., Order Denying in Part and Granting in Part Petition for Objection to Permit, 2001 Petition, at 10-11 (U.S. EPA Adm'r May 24, 2004). The Statement of Basis for the Permit, and DNR's response to comments, fail to provide any explanation of why biennial stack tests, monitoring, and recordkeeping related to particulate matter are sufficient to show continuous compliance with visible emission limits. See also In re Fort James Camas Mill, Petition No. X-1999-1 at 8 (U.S. EPA Adm'r Dec. 22, 2000) (reasons for selecting monitoring methods must be clearly documented in the permit record).

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DNR's failure to set forth the basis for its assumption that PM monitoring is sufficient to ensure compliance with the visible emission limit results in a deficient permit because it does not appear that DNR has actually determined that the does ensure continuous compliance with the visible emission limit. 40 C.F.R. § 70.6(a)(3).

DNR's failures to include the required visible emission monitoring and to explain how the permit's PM monitoring ensures compliance with visible emission limits are exacerbated by the fact that the PM monitoring in the permit is deficient. The Permit relies on biennial stack tests, alone, for P04. DNR fails to explain how this biennial testing assures continuous compliance with the PM limit (or the visible emission limit) in the two-year period between tests. DNR merely asserts that it has determined that the recordkeeping requirements are sufficient to ensure compliance with the PM, and therefore also the visible emission, limits. See Ex. B, p. 1. DNR fails to explain how it reached this decision. This results in a deficient permit because DNR has not actually determined that the Permit requires sufficient monitoring and recordkeeping for PM for P04 to assure continuous compliance. 40 C.F.R. § 70.6(a)(3). Without additional explanation, DNR's mere assertion of sufficiency is not adequate to demonstrate that the Permit assures compliance with the applicable limits. See e.g., In the Matter of Midwest Generation, LLC Fisk Generating Station, Order Responding to Petition to Object at p. 7 (Adm'r March 25, 2005) (recordkeeping requirements, alone, are insufficient without specifying how compliance is determined).

2. The Monitoring for PM Emissions from P05 and P06 Is Insufficient.

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The Permit identifies "U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H, 5I, or 17, including condensible backhalf emissions (U.S. EPA Method 202)" as an appropriate monitoring method during a compliance stack test on P05 and P06, but fails to require regular compliance stack tests in the permit. See Permit § I.D.(1)(b) and (c). The permit relies solely upon the use of natural gas in P05 and P06 to demonstrate compliance. Permit § I.D.(1)(b). This assumption-- that fuel choice necessarily achieves compliance-- is insufficient to assure compliance. Even assuming that limiting fuel used in combustion sources to natural gas is sufficient to demonstrate compliance with PM limits, fuel restrictions, alone, are insufficient to demonstrate compliance for P05 and P06 because natural gas combustion is not the only source of PM emissions from P05 and P06. P05 and P06 include saws and paint spray devices- which also generate particulate matter emissions. The Permit does not require testing for these sources, but merely requires that they be exhausted inside the building as a method of controlling particulate matter emissions. See Permit § I.D.(1)(a). Sierra Club's comments noted that this method of determining compliance is insufficient unless the facility monitors all windows, doors, and ventilation openings to ensure that P05 and P06 particulate matter emissions are not escaping through those emission points. See Ex. B at 3. DNR failed to respond to this comment. See Ex. C at p. 3. DNR's failure to explain how the requirement to burn natural gas is sufficient to ensure compliance with PM limits for P05 and P06, which have the potential to emit PM from sources other than through natural gas combustion. This results in a deficient permit because DNR has not demonstrated that the Permit contains sufficient monitoring to assure compliance. 40 C.F.R. § 70.6(a)(3).

3. The Permit Fails To Contain All Applicable Emission Limits for B03

The Louisiana Pacific facility contains an oil heater rated at 30.0 million BTU per hour, which is labeled "B03" in the Permit. B03 is subject to a New Source Performance Standard ("NSPS") limit, which requires 20% opacity, except for one 27% opacity period per hour and excluding startup, shutdown and malfunction. See Permit (Exhibit A) § I.B.2.a.(1), (2); 40 C.F.R. § 60.43c(c). Sierra Club commented that the NSPS limit is not the only visible emission limit applicable to B03, and that the SIP visible emission limit is more stringent than the NSPS

limit. See Ex. B at pp.12-13. It appears that DNR agreed with Sierra Club's comments, because DNR's response to comments states "[t]he conclusion of the permit author is that both limits are applicable." See Ex. C at p. 5. However, DNR failed to include the more restrictive SIP limit in the Permit. Ironically, the Permit contains only the NSPS limit, but includes the exemptions from both the NSPS and the SIP. See Permit (Exhibit A) § I.B.2.a. In other words, rather than including the more stringent SIP limit, the Permit contains the less stringent NSPS and further weakens that limit by adding the exemptions from the SIP limit that are not contained in the NSPS limit.

The NSPS limit requires the source to comply with a 20% opacity limit, but provides two exceptions:

- Periods of startup, shutdown, and malfunction; and
- One six-minute period of 27% opacity per hour.

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See Permit § I.B.2.a.; 40 C.F.R. § 60.43c(c). The SIP, however, contains a 20% opacity limit, which does not exempt opacity exceedances during shutdown or malfunction, and does not exempt one six-minute period of 27% opacity per hour. See Wis. Admin. Code § NR 431.05. Instead, the 20% opacity limit applies at all times, except "[w]hen combustion equipment is being cleaned or a new fire started," in which case opacity may not exceed 80% opacity for any 6 minutes in one hour. Wis. Admin. Code § NR 431.05(1). This exception cannot apply more than 3 times per day. Id. Because it applies to periods of operation that are exempt from the NSPS (periods of shutdown and malfunction, and one six-minute period per hour), the SIP limit is more stringent than the NSPS limit. Compare Wis. Admin. Code § NR 431.05 with NR 440.207(4)(c) and Permit § I.B.2.a.

Pursuant to Wis. Admin. Code § NR 440.10(1), "[e]xemption or the granting of an exemption from any requirement of [ch. NR 440] does not relieve any person from compliance with chs. NR 400 to 499 or with ch. 285 or s. 299.15, Stats." See also 40 C.F.R. § 60.24(g). Moreover, when another statute or regulation provides a more stringent limit than the NSPS limit, "the more restrictive limitation shall be met." Wis. Admin. Code § NR 440.10(2). The Permit fails to include the more stringent SIP requirement, which applies at periods of shutdown and malfunction, and does not exempt periods of 27% opacity. See Permit (Ex. A) § I.B.2.a. Instead, inexplicably, the Permit includes the less stringent NSPS standard, and adds additional exceptions from the SIP. The permit is deficient because it fails to include the more stringent

visible emission limit for B03. Therefore, the Administrator must object to the Permit. 42 U.S.C. § 7661d(b); 40 C.F.R. § 70.8(d); New York Public Interest Research Group v. Whitman, 321 F.3d 316, 333 n.11 (2nd Cir. 2002).

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4. The Permit Contains Conditions That Violate The Credible Evidence Rule.

The U.S. EPA has the authority to bring enforcement actions "on the basis of any information available to the Administrator." 42 U.S.C. § 7413 (emphasis added). This has been interpreted to mean any "credible evidence" that a court would accept. U.S. EPA Region 9 Title V Permit Review Guidelines, Sept. 9 1999, p. III-46. U.S. EPA has stated that this means that "any credible evidence can be used to show a violation of or, conversely, demonstrate compliance with an emissions limit." *Id.* Permit language may not exclude the use of any data that may provide credible evidence. *Id.* The U.S. EPA views permit conditions providing enumerated compliance test methods as tacitly excluding the use of other data to demonstrate compliance or noncompliance. This tacit exclusion violates the credible evidence rule. "The permit must specify the source's obligations for monitoring in a way that does not establish an exclusive link between the test method and the emissions limit." *Id.*

The Permit divides requirements into four separate columns for: (1) pollutant; (2) numeric limit; (3) compliance demonstration method; and (4) compliance demonstration, monitoring and reporting. Ex. A § I.A.1.a-c. The Preamble to the Permit states that the "Compliance Demonstration" provisions (column "c" throughout the Permit) lists the methods that "may be used to demonstrate compliance with the associated emission limit or work practice standard." Permit (Ex. A) at p. 4. This provision impermissibly enumerates the evidence to be used to determine compliance. Because this language has the potential to be interpreted as limiting the evidence that can be used to enforce the Permit's limits, it violates the credible evidence rule. U.S. EPA Region 9 Title V Permit Review Guidelines, Sept. 9 1999, p. III-46 (permit conditions should not enumerate compliance methods in a way that creates an exclusive link between the compliance method and demonstrating compliance).

Adding to the confusion, the Permit contains two definitions of the "Compliance Demonstration" requirements in the permit. See Permit (Ex. A) p. 4. The second definition states that the "Compliance Demonstration" column of the permit "contains monitoring and testing requirements and methods to demonstrate compliance with the conditions." This

provision also tacitly limits the "methods to demonstrate compliance" to only those listed in the specific column of the Permit labeled "Compliance Demonstration." Again, this violates the credible evidence rule. While the Permit contains a vague attempt to preserve the "credible evidence" rule, the attempt is insufficient to ensure that credible evidence can be used to enforce the Permit's limits by USEPA and citizens. The Permit states:

Notwithstanding the compliance determination methods which the owner or operator of a source is authorized to use under ch. NR 439, Wis. Admin. Code, **the Department** may use any relevant information or appropriate method to determine a source's compliance with applicable emission limits.

Permit (Ex. A) at p. 4 (emphasis added). There are two significant problems with this apparent attempt to comply with the credible evidence rule:

- 1) The sentence refers to the compliance demonstration methods in <u>Wis. Admin.</u> Code ch. 439, rather than those in <u>the Permit</u>. It appears that DNR means to say that "notwithstanding the provisions of this <u>permit</u>, any relevant information may be used to enforce applicable permit limits." In other words, the provision allowing DNR to use any evidence <u>despite NR 439</u> does not cure the restrictive evidence provisions in the <u>permit</u>.
- 2) The provision states that "the <u>Department</u> may use any relevant information..." This implies that USEPA and citizens may not use "any relevant information" to enforce the permit. In fact, DNR's response to comments notes that "the <u>Department</u> is not limited from using credible any evidence...," but fails to respond to Sierra Club's comment that the permit could be interpreted as limiting USEPA and citizens' ability to use any credible evidence. <u>See</u> Ex. C at 2 (emphasis added).

The Permit is deficient because it impermissibly restricts the evidence that U.S. EPA and citizens can use to enforce the Permit's terms. Additionally, the permit contains other violations of the credible evidence rule, by linking compliance to a specific testing or monitoring requirement, including the following:

• Section I.A.(1)(b)(1) states "The permittee shall perform compliance emission testing of particulate matter emissions from Stack S02, while burning wood fuel in both dryer burners, to demonstrate compliance with the particulate matter emission limit..." By establishing an exclusive link between the test and the emissions limit, the condition unacceptably limits credible evidence.

- Section I.A.(2)(b)(1) states "The permittee shall perform compliance emission testing of visible matter emissions from Stack S02, while burning wood fuel in both dryer burners, to demonstrate compliance with the visible emission limit..." Again, by establishing an exclusive link between the test and the limit, the provision impermissibly limits credible evidence.
- Section I.A.(3)(b)(1) states "The permittee shall perform compliance emission testing of carbon monoxide emissions from Stack S02, while burning wood fuel in both dryer burners, to demonstrate compliance with the carbon monoxide emission limit..."

 This illegally limits credible evidence.
- Section I.A.(4)(b)(1) states "The permittee shall perform compliance emission testing of volatile organic compound (VOC) emissions from Stack S02, while burning wood fuel in both dryer burners, to demonstrate compliance with the VOC emission limit..." This illegally limits credible evidence.
- Section I.A.(5)(b)(1) states "The permittee shall perform compliance emission testing of formaldehyde emissions from Stack S02, while burning wood fuel in both dryer burners, to demonstrate compliance with the formaldehyde emission limit..." This illegally limits credible evidence.
- Section I.B.(1)(b)(1) states "The permittee shall conduct a compliance emission test of the particulate matter emissions from Boiler B03, while burning wood fuel, within 90 days of 1 September 2007, or within 90 days of an alternate date specified by the Department in writing, to demonstrate compliance with the emission limit..." By establishing an exclusive link between the test and the limit, the provision impermissibly limits credible evidence.
- Section I.B.(3)(b)(1) states "The permittee shall perform compliance emission testing of carbon monoxide emissions from Stack S03, while burning wood fuel in the thermal oil heater, to demonstrate compliance with the carbon monoxide emission limit..." This illegally limits credible evidence.
- Section I.B.(4)(b)(1) states "The permittee shall conduct a compliance emission test of the formaldehyde emissions from Boiler B03, while burning wood fuel, within 90 days of 1 September 2007, or within 90 days of an alternate date specified by the Department in writing, to demonstrate compliance with the emission limit.." By establishing an exclusive link between the test and the limit, the provision impermissibly limits credible evidence.
- Section I.C.(1)(b)(1) states "The permittee shall perform compliance emission testing of particulate matter emissions from Stack S04, to demonstrate compliance with the particulate matter emission limit..." This illegally limits credible evidence by creating an exclusive link between the test and the limit.

- Section I.C.(2)(b)(1) states "The permittee shall perform compliance emission testing of visible matter emissions from Stack S04, to demonstrate compliance with the visible emission limit..." For the same reasons as above, this provision is illegal.
- Section I.C.(3)(b)(1) states "The permittee shall perform compliance emission testing of carbon monoxide emissions from Stack S04, to demonstrate compliance with the carbon monoxide emission limits..." This violates the credible evidence rule.
- Section I.C.(4)(b)(1) states "The permittee shall perform compliance emission testing of volatile organic compound (VOC) emissions from Stack S04, to demonstrate compliance with the VOC emission limit..." This violates the credible evidence rule.
- Section I.C.(5)(b)(1) states: "The permittee shall perform compliance emission testing of formaldehyde emissions from Stack S04, to demonstrate compliance with the formaldehyde emission limit..." This violates the credible evidence rule.
- Section I.B.(a)(3) states "The permittee shall calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system..." This link between the COMS and the opacity limit may illegally restrict credible evidence and must be changed.

5. The Permit Contains Conditions That Violate U.S. EPA Policy Requiring a Permit To Be Practically Enforceable.

The Permit contains numerous conditions which are not practically enforceable. These conditions violate U.S. EPA policy regarding practical enforceability and, consequently, must be corrected. For a permit condition to be enforceable, the permit must leave no doubt as to exactly what the facility must do to comply with the condition. U.S. EPA Region 9 Title V Permit Review Guidelines, Sept. 9 1999, p. III-46.

A permit is enforceable as a practical matter (or practically enforceable) if permit conditions establish a clear legal obligation for the source [and] allow compliance to be verified. Providing the source with clear information goes beyond identifying the applicable requirement. It is also important that permit conditions be unambiguous and do not contain language which may intentionally or unintentionally prevent enforcement.

Id.

A permit condition is not practically enforceable if it references documents, procedures, instructions, etc., that are described in a manner that is insufficient to allow such items and the

content thereof to be specifically, finally and conclusively identified. U.S. EPA Region 9 Title V Permit Review Guidelines, Sept. 9 1999, p. III-46. Further, "specific numbers must be incorporated into the permit rather than a reference to a document which may not include clear requirements." <u>Id.</u> at III-52. Terminology such as "reasonable precautions" or "best engineering practices" must be defined. <u>Id.</u> at III-52, III-53.

The permit is not practically enforceable for the following reasons:

• The Permit relies on manufacturer recommendations that are unknown to DNR and are not in the permit record to ensure compliance.

Section I.A.(1)(b)(5) states "[t]he permittee shall establish quality assurance and control practices to ensure the continuing validity of the wet electrostatic precipitator operating parameter data specified in conditions I.A(1)(b)3) and I.A(1)(c)4). The permittee shall consider manufacturer recommendations or requirements applicable to the monitoring in developing appropriate quality assurance and control practices." DNR must specify what quality assurance and control practices are required. If a specific plan or "manufacturer recommendations" are required, DNR must incorporate such requirements into the permit. See e.g., Fisk Generating Station at p. 14 (requirements must be contained within the permit for the permit to be practically enforceable).

DNR's response to comments states that the "Malfunction Prevention and Abatement Plan... is required to be submitted to the Department upon request..." See Ex. C at 3. This is insufficient to comply with Title V. First, if DNR is relying on the Malfunction Prevention and Abatement Plan to ensure compliance, the Plan must be provided in the application. 40 C.F.R. § 70.5(a)(2) (a complete application must contain sufficient information to determine all applicable requirements), 70.5(c) (application cannot "omit information needed to determine the applicability of, or impose, any applicable requirement..."), 70.5(c)(3)(vi) (application must include any "work practice standards"). Second, DNR must determine that the permit requirements (including the Malfunction Plan) assure compliance with all applicable requirements. 40 C.F.R. §§ 70.6(a)(1), 70.7(a)(iv). DNR cannot possibly rely on the Plan for its conclusion that the facility will comply with all requirements, when DNR has never reviewed the Plan. See Environmental Defense Center, Inc. v. EPA 344 F.3d 832, 855-56 (9th Cir.2003) ("[P]rograms that are designed by regulated parties must, in every instance, be subject to meaningful review by an appropriate regulating entity to ensure that each such program

[complies with the relevant statutory standard]."); <u>In re RockGen Energy Center</u>, 8 E.A.D. 536, 553-54 (EAB 1999) (remanding DNR permit requirement for a startup/shutdown plan that was not reviewed by DNR before permit issuance and was not subject to public notice and review).

Third, because compliance with the Permit, and the underlying SIP requirements, is based on compliance with the Malfunction Plan, the plan must be submitted to DNR pursuant to Wis. Admin. Code § NR 439.03(1)(b) (reporting must "include sufficient data for the department to determine compliance…"). If the DNR must request the Plan before determining compliance with Section I.A.(1), the reporting requirements are deficient.

Lastly, because compliance with the Plan constitutes a Permit requirement, the Plan must be subject to public notice and comment. The public cannot comment on the sufficiency of the Permit, which incorporates the Plan, when the Plan is not part of the permit record. 40 C.F.R. § 70.7(h); see e.g., Waterkeeper Alliance v. EPA, 399 F.3d 486, 503-04 (2nd Cir. 2005) (invalidating EPA regulation that allowed Nutrient Management Plans to be submitted after public comment and after a NPDES permit was issued).

• The Permit contains requirements that rely on terms which are not defined.

Permit section I.A.(1)(a)(4) requires the facility to:

restore operation of the dryer system to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused startup or shutdown conditions).

This requirement contains vague terms, which are not used or defined in the SIP, and are not practically enforceable. The following terms must be defined more specifically to make this permit requirement practically enforceable: "normal or usual manner of operation;" "expeditiously as possible;" "good air pollution control practices;" "minimizing the period of any startup, shutdown, or malfunction;" and "normal operation."

• The Permit Fails to Ensure Compliance with Fugitive Dust Requirements.

The Permit must also contain specific requirements to make Section I.F.(1)(a) practically enforceable. The Permit states "[t]he permittee may not cause, allow, or permit any materials to be handled, transported, or stored without taking precautions to prevent particulate matter from becoming airborne." DNR, EPA and the public cannot enforce this requirement unless the Permit states, specifically, what precautions are necessary to prevent particulate matter from becoming airborne. DNR's response to comments notes that the substantive "good engineering practices," which defined which precautions must be taken and when, will be contained in "the Fugitive Dust Control Plan." The "Fugitive Dust Control Plan" is not part of the Title V permit, however. Instead, as DNR notes, the Plan will be submitted to the Department at a later date. DNR cannot determine compliance now, based on the submission of a plan later. 40 C.F.R. §§ 70.6(a)(1), 70.7(a)(iv); Environmental Defense Center, 344 F.3d at 855-56.

• The Permit Must Require All Documents and Records Necessary to Determine Compliance to Be Provided To DNR.

The Permit is not practically enforceable by citizens because it does not require the documents necessary to determine compliance to be publicly available at the DNR's offices. As noted above, all terms of a permit must "allow compliance to be verified." US EPA Region 9 Title V Permit Guidelines at p. III-46. Throughout the Permit, the permittee is required to maintain records to show compliance with emission limits, but is not required to submit those records to the DNR. Although, as DNR points out (Ex. C at 4), Wis. Admin. Code § NR 439.03(1)(b) allows a source to submit "a summary of the monitoring results," that summary must nevertheless "include sufficient data for the department to determine whether the source is in compliance with the applicable requirements..." This minimal requirement cannot be waived, even if DNR maintains the right to request the necessary data.

DNR's response to comments asserts that the Permit's reporting requirements are sufficient because "Agency staff have the authority to request additional information in the event that it is necessary to determine the compliance facility of the facility." See Ex. C at 4. This violates Wis. Admin. Code § NR 439.03(1)(b). If DNR must "request additional information" to determine compliance, then the summary monitoring reports required by the Permit must not "include sufficient data for the department to determine whether the source is in compliance with

the applicable requirements," as required by Wis. Admin. Code § NR 439.03(1)(b). The requirement in NR 439.03(a)(b) to submit sufficient data is an "applicable requirement" because it is part of the SIP. 40 C.F.R. § 70.2. Therefore the Permit is deficient because it relies on DNR staff's ability to request additional information, rather than requiring periodic reporting of sufficient information to ensure compliance.

Moreover, the requirement to submit sufficient data (and not just to record and keep the data on-site) is also important because citizens must have access to compliance data. Unlike DNR staff, citizens do not have the authority to demand compliance information from the source. If sufficient data is not submitted to DNR, citizens are unable to access the data necessary to do their part in ensuring compliance. The following monitoring and record keeping requirements violate Wis. Admin. Code § NR 439.03 because they do no require sufficient compliance documents to be submitted to DNR, and therefore, publicly available:

- Section I.A.(1)(c)(5), (8) and (10)
- Section I.A.(2)(c)(2)
- Section I.A.(3)(c)(2) through (6)
- Section I.A.(4)(c)(2) through (5)
- Section I.A.(5)(c)(2) through (5)
- Section I.A.(6)(b) and (c)
- Section I.B.(1)(c)(2) through (8)
- Section I.B.(3)(c)(2) through (5)
- Section I.B.(4)(c)(2) and (3)
- Section I.B.(5)(b) and (c)
- Section I.C.(1)(c)(2)
- Section I.C.(2)(c)(2)
- Section I.C.(3)(c)(2) and (3)
- Section I.C.(4)(c)(2)
- Section I.C.(5)(c)(2) through (4)
- Section I.C.(6)(b) and (c)
- Section I.C.(7)(b) and (c)
- Section I.D.(1)(b)(2) and (3) and I.D.(1)(c)(2) through (4)
- Section I.D.(2)(c)(2)
- Section I.D.(3)(b) and (c)
- Section I.D.(4)(b) and (c)
- Section I.E.(1)(c)(3) and (4)
- Section I.E.(2)(b) and (c)
- Section I.E.(3)(b) and (c)
- Section I.E.(4)(b) and (c)
- Section I.F.(1)(c)
- Section I.H.(1)(b) and (c)

Additionally, it is important that summary excess emission reports, Permit § I.J.(5)(a)(2), contain <u>all</u> of the information necessary to determine compliance with permit limits. This includes information about startup and shutdown conditions if the permit exempts excess emissions during startup and shutdown, the dates and times when emissions exceeded permitted amounts, and documentation of all actions taken when the Permit relies on work practices to ensure compliance. 40 C.F.R. § 70.6(a)(3)(ii) and (iii).

6. CONCLUSION

For the foregoing reasons, the permit fails to meet federal requirements in numerous ways. These deficiencies require that the Administrator object to issuance of the permit pursuant to 40 C.F.R. § 70.8(c)(1).

Dated in Madison, Wisconsin this 9th day of May, 2006.

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David C. Bender

SIERRA CLUB

Bruce E. Nilles

PROPOSED AIR POLLUTION CONTROL OPERATION PERMIT

EI FACILITY NO.: 735057950	PERMIT NO.: 735057950-P10		
TYPE: Part 70			
In compliance with the provisions of Chapter 285, Wis. Stats., and Chapters NR 400 to 499, Wis. Adm. Code,			
Name of Source:	Louisiana-Pacific Corporation		
Street Address:	9300 County Highway S Tomahawk, WI 54487		
Responsible Official: Title:	Jon Smith Plant Manager		
is authorized to operate an existing oriented strand board manufacturing facility in conformity with the conditions herein.			
	x MARCH 2011. A RENEWAL APPLICATION MONTHS, BUT NOT MORE THAN 18 MONTHS, NR 407.09(1)(b)1., Wis. Adm. Code]		
No permittee may continue operation of a source after this operation permit expires, unless the permittee submits a timely and complete application for renewal of this permit. If the permittee submits a timely and complete application for renewal, the existing operation permit will not expire until the renewal application has been finally acted upon by DNR. [ss. 227.51, & 285.66(3), Wis. Stats., and NR 407.04(2), Wis. Adm. Code]			
This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I and II hereof.			
Dated at Rhinelander, Wisconsin, Draft	t		
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES For the Secretary	3		
By <u>Draft</u> . Neal Baudhuin, Air Program Supervisor Northern Region			

Preamble

An asterisk "*" throughout this document denotes legal authority, limitations, and conditions which are not federally enforceable.

The facility has received five previous construction permits from the DNR. Permit No. 91-MWH-094 was issued by the DNR on 24 January 1992 to cover the initial construction of the facility. The permit covered the thermal oil heater (B03), dryer system (P01 and P02), wafer press (P04), and various fugitive and insignificant emission sources. This permit was later revised as Permit No. 91-MWH-094R on 27 July 1994. The applicable conditions were included in the Title V operation permit (735057950-P01) that was issued by the DNR on 14 August 2000. Permit No. 91-MWH-094R was superseded by Permit No. 05-MDW-024.

Permit No. 92-MWH-154 was issued by the DNR on 5 April 1993 for three coating processes (P05, P06, and P07). These processes were installed and later removed from the facility.

Permit No. 96-POY-037 was issued by the DNR on 26 June 1996 for three coating processes (P05, P06, and P07). Process P05 is the only one of these three processes that was constructed. The applicable conditions were included in the Title V operation permit issued by the DNR on 14 August 2000. Permit No. 96-POY-037 was superseded by Permit No. 05-MDW-024.

Permit No. 03-MDW-120 was issued by the DNR on 3 November 2003 for the construction of a new finishing line (Process P06). Permit No. 03-MDW-120 was superseded by Permit No. 05-MDW-024.

Permit No. 05-MDW-024 was issued by the DNR on 17 June 2005. The permit covers all of the emission units at the facility and changed various emission limits, fuel usage limits, and production limits that were established in previous construction permits to ensure that the construction and modification of the facility did not trigger Prevention of Significant Deterioration (PSD) applicability for the facility. The synthetic minor status of the facility under PSD is maintained through various emission limits, fuel usage limits, and production limits. As a result, Permit No. 05-MDW-024 superseded Permit Nos. 91-MWH-094R, 96-POY-037, and 03-MDW-120 when it was issued as a final permit.

A National Emission Standard for Hazardous Air Pollutants (NESHAP) for plywood and composite wood products (40 C.F.R. Part 63, Subpart DDDD) was published in the Federal Register as a final rule on 30 July 2004. A NESHAP for industrial, commercial, and institutional fuel combustion sources (40 C.F.R. Part 63, Subpart DDDDD) was published in the Federal Register as a final rule on 13 September 2004. These rules establish Maximum Achievable Control Technology (MACT) standards for the source categories in the standards. The standards are expected to apply to the Louisiana-Pacific Tomahawk Mill because the facility is a major source of federal hazardous air pollutants. Specific requirements from these two MACT standards are not included in the renewal of the company's Title V operation permit because neither standard will take effect before calendar year 2007.

Concurrent Permit Actions Performed as Part of the Review and Issuance of Permit No. 735057950-P10

Construction Permits Issued in Conjunction with Permit No. 735057950-P10 under section 285.61(8), Wis. Stats.:

None

Revised Construction Permits Issued in Conjunction with Permit No. 735057950-P10 under section NR 406.11, Wis. Adm. Code:

None

Operation (CONOP) Permits Issued in Conjunction with Permit No. 735057950-P10 under section 285.62(7)(b), Wis. Stats.: 05-MDW-024-OP

Revised Operation Permits Issued in Conjunction with Permit No. 735057950-P10 under sections NR 407.11, 407.12, 407.13 and/or 407.14, Wis. Adm. Code:

None

The following permits are adopted by Permit No. 735057950-P10 under section 285.65(3), Wis. Stats., and sections NR 406.11(1)(c) & (d), and NR 407.15(3) & (4), Wis. Adm. Code, which then becomes the primary enforceable document:

05-MDW-024-OP

Stack and Process Index:

Stack S02; Control C01 & C02; Processes P01 & P02 - Wafer dryer system which includes two rotary dryers, two cyclones, two wet electrostatic precipitators, and two 32.0 million BTU per hour burners.

Stack S03; Control C03; Boiler B03 - Wood fired thermal oil heater rated at 30.0 million BTU per hour. Controlled by a cyclone and baghouse.

Stack S04; Process P04 - Wafer press.

Stack S05; Process P05 - Panel siding line.

Stack S06; Process P06 - Lap siding line.

Stack S09; Boiler B09 - Natural gas fired thermal oil heater rated at 25.2 million BTU per hour.

Stack F41; Process P41 – Vehicle traffic on paved and unpaved roads.

Stack F42; Process P42 - Fugitive emissions from handling, use, and storage of various resins.

Insignificant Emission Units

- Maintenance of Grounds, Equipment, and Buildings,
- Boiler, Turbine, and HVAC System Maintenance,
- Pollution Control Equipment Maintenance,
- Internal Combustion Engines Used for Warehouse and Material Transport,
- Fire Control Equipment,
- Janitorial Services,
- Office Activities.
- Convenience Water Heating,
- Convenience Space Heating,
- Fuel Oil Storage Tanks (< 10,000 gallons),
- Sanitary Sewer and Plumbing Venting,
- Log Debarking and Waferizing Operations,
- Log Conditioning Ponds,
- Phenolic/ Formaldehyde Resin Tank,
- Flying Cutoff Saw with Cyclone and Baghouse,
- Polymeric MDI Resin Tanks (2),

- Wax Storage Tank,
- Parts Washers,
- Forming Dust Collection System and Baghouse,
- Edge Coating Spray Booth,
- Trim and Grade Dust Collection System and Baghouse,
- Profiler and Sander Dust Collection System and Baghouse.

<u>Permit Shield</u> – Unless precluded by the Administrator of the USEPA, compliance with all emission limitations in this operation permit is considered to be compliance with all emission limitations established under sections 285.01 to 285.87, Wis. Stats., and emission limitations under the federal clean air act, that are applicable to the source if the permit includes the applicable limitation or if the Department determines that the emission limitations do not apply. The following emission limitations were reviewed in the analysis and preliminary determination and were determined not to apply to this stationary source:

- The requirements in sections NR 440.207(3), (5), and (7), Wis. Adm. Code do not apply to the thermal oil heater because the thermal oil heater does not burn coal.
- The biennial compliance emission testing requirements for particulate matter in section NR 439.075(2)(a)1., Wis. Adm. Code do not apply to the thermal oil heater because the allowable particulate matter emissions are less than 100 tons per year.
- The compliance assurance monitoring (CAM) requirements in 40 C.F.R. Part 64 do not apply to the baghouse on the thermal oil heater because the potential to emit of particulate matter before control is less than 100 tons per year.
- The requirements in chapter NR 424, Wis. Adm. Code do not apply to Process P42 because the activities included in P42 do not meet the definition of a process line in section NR 400.02(72), Wis. Adm. Code.

<u>Part I</u> – The headings for the areas in the permit are defined below. The legal authority for these limitations or methods follows them in [brackets].

<u>Pollutant</u> – This area will note which pollutant is being regulated by the permit.

<u>Limitations</u> – This area will list all applicable emission limitations that apply to the source, including case-by-case limitations such as Latest Available Control Techniques (LACT), Best Available Control Technology (BACT), or Lowest Achievable Emission Rate (LAER). It will also list any voluntary reductions on hours of operation, raw material use, or production rate requested by the permittee to limit potential to emit.

Compliance Demonstration – The compliance demonstration methods outlined in this area may be used to demonstrate compliance with the associated emission limit or work practice standard listed under the corresponding Limitations area. The compliance demonstration area contains limits on parameters or other mechanisms that will be monitored periodically to ensure compliance with the limitations. The requirement to test as well as initial and periodic test schedules, if testing is required, will be stated here. Not withstanding the compliance determination methods which the owner or operator of a source is authorized to use under chapter NR 439, Wis. Adm. Code, the Department may use any relevant information or appropriate method to determine a source's compliance with applicable emission limitations.

Reference Test Methods, Recordkeeping, and Monitoring Requirements – Specific USEPA Reference test methods or other approved test methods will be contained in this area and are the methods that must be used whenever testing is required. A reference test method will be listed even if no testing is immediately required. Also included in this area are any recordkeeping requirements and their frequency and reporting requirements. Accuracy of monitoring equipment shall meet, at a minimum, the requirements of sections NR 439.055(3) and (4), Wis. Adm. Code, as specified in Part II of this permit.

<u>Condition Type</u> – This area specifies other conditions that are applicable to the entire facility that may not be tied to one specific pollutant.

<u>Conditions</u> – This area lists specific conditions usually applicable to the entire facility or compliance requirements.

<u>Compliance Demonstration</u> – This area contains monitoring and testing requirements and methods to demonstrate compliance with the conditions.

Part II – This section contains general limitations that the permittee must abide by. These requirements are standard for most sources of air pollutants so they are included in this section with every permit.

PROPOSED PART I SPECIFIC PERMIT CONDITIONS

A. Stack S02; Control C01 & C02; Process P01 & P02 - Dryer system with two rotary dryers and burners that fire wood fuel or natural gas. Each rotary dryer is controlled by a cyclone and wet electrostatic precipitator. The cyclones are part of the process so there are no permit conditions for these devices.

Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(1) Particulate Matter & PM10 Emissions	1) Emissions may not exceed 16.9 pounds per hour from Stack S02. [ss. 285.63(1)(b), Wis. Stats., and NR 404.05(3)(a), NR 415.05(2), & NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall perform compliance emission testing of particulate matter emissions from Stack S02, while burning wood fuel in both dryer burners, to demonstrate compliance with the particulate matter emission limit in condition I.A(1)(a)1): a) Biennial testing shall be conducted as long as the permit remains valid. b) Each biennial test of particulate matter emissions shall be performed within 90 days of September 1st of odd numbered years, or within 90 days of an alternate date specified by the Department in writing. c) The permittee may request and the Department may approve a waiver from the required biennial testing provided the results of the most recently completed biennial test demonstrate that the particulate matter emissions are 50 percent or less of the applicable limitation in condition 1 A(1)(a)	1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H, 5I, or 17, including condensible backhalf emissions (U.S. EPA Method 202), unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(1), Wis. Adm. Code] 2) The permittee shall retain a copy of the results from each compliance emission test conducted pursuant to condition I.A(1)(b)1). [s. NR 439.04(1)(a), Wis. Adm. Code]
Continued on Next Page		d) The testing shall be conducted in accordance with the conditions in condition I.I(3)(a)1). [ss. NR 407.09(4)(a)1., NR 439.07, NR 439.075(1), NR 439.075(3)(b), and NR 439.075(4)(a)1.b., Wis. Adm. Code]	

The 16.9 pound per hour emission limit was established in Permit No. 91-MWH-094, retained in Permit No. 05-MDW-024, is based on modeling and is included in the permit to protect the National Ambient Air Quality Standards (NAAQS). This emission limit is more restrictive than the allowable emission limit of 18.92 pounds per hour calculated from the process weight rate equation in section NR 415.05(2), Wis. Adm. Code. The allowable emission rate of 18.92 pounds per hour was determined using a process weight rate of 14.60 tons per hour and is more restrictive than the emission limit calculated using the exhaust gas limit in section NR 415.05(1)(m), Wis. Adm. Code.

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(continued)
P01 & P02
Process P0
& C02;
Control C01
Stack S02:

Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(1) Particulate Matter & PM10 Emissions (continued)	2) The permittee may burn only wood fuel and natural gas in the dryer system burners. ² [ss. 285.65(3), and 285.63(1)(a), Wis. Stats.] 3) The permittee may use calcium carbonate as an additive in the dryer system burners when combusting trimmings from the saw line. Calcium carbonate use may not exceed three (3) percent of the total weight of wood fuel burned by the dryer system burners. [ss. 285.65(3), and 285.63(1)(a), Wis. Stats.]	2) The permittee shall use the wet electrostatic precipitators (C01 and C02) to control emissions at all times the respective wafer dryer (P01 and P02) is in operation. [s. NR 407.09(1)(a), Wis. Adm. Code] 3) The permittee shall maintain the following wet electrostatic precipitator operating parameters within the specified ranges: a) Peak secondary voltage - greater than 38 kV; b) Peak secondary current - 30 to 500 mA; and c) Spark rate - 25 to 35 sparks per minute. [s. NR 407.09(4)(a)1., Wis. Adm. Code, s. 285.65(13), Wis. Stats., and 40 C.F.R. 64.3(a)] 4) The permittee shall perform periodic internal inspections of the wet electrostatic precipitator to ensure that the control equipment is operating properly. Inspections shall be performed at least once per calendar year and the interval between inspections may not be closer than six (6) months. These inspections shall include, but not be limited to inspections, and maintenance/ repairs (as necessary) of: a) quench chamber nozzles for plugging;	3) The permittee shall keep monthly records of the type and amount of fuel burned by the dryer system burners. These records shall include the amount of calcium carbonate burned by the dryer system burners. [s. NR 439.04(1)(d), Wis. Adm. Code] 4) The permittee shall monitor and record the following wet electrostatic precipitator (ESP) operating parameters once for every eight (8) hours of process operation or once per day, whichever yields the greater number of measurements: a) Peak secondary voltage from the wet ESP voltmeter; b) Peak secondary current from the wet ESP ammeter; and c) Spark rate from the wet ESP spark detection device. [s. NR 439.055(6), Wis. Adm. Code, s. 285.65(13), Wis. Stats., 40 C.F.R. 64.3(b)(4),
Continued on Next Page		b) high voltage probes for alignment and tightness; c) electrode wires and other critical areas for corrosion; d) insulators for cracks and signs of arcing. [s. NR 407.09(4)(a)1., Wis. Adm. Code, s. 285.65(13), Wis. Stats., and 40 C.F.R. 64.3(a)(1)]	64.6(c)(3)]

² According to section NR 440.207(2)(zm), Wis. Adm. Code, wood fuel "means wood, wood residue, bark or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sander dust, wood chips, scraps, slabs, millings, shavings and processed pellets made from wood or other forest residues."

³ Calcium carbonate was approved as a fuel additive by the Department in a letter dated 26 May 1998.

⁴ Charts that continuously record the voltage and current may be used to satisfy this monitoring requirement.

	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements	 5) The permittee shall keep records of: a) the date, time, and initials of the person performing the inspections required by condition I.A(1)(b)4); b) a list of the items inspected; and c) any maintenance or repairs performed as a result of these inspections. [s. NR 439.04(1)(d), Wis. Adm. Code, s. 285.65(13), Wis. Code, code	6) The permittee shall include the following information in the Malfunction Prevention and Abatement Plan required by condition I.I(6)(a)1): a) the quality assurance and control practices required by condition I.A(1)(b)5) for the wet ESP; b) startup and shutdown practices for the dryer system; c) a description of the periodic flushes of the wet ESP power grid and collection surfaces which includes the frequency and duration of the flushes. [s. NR 439.04(1)(d), Wis. Adm. Code, s. 285.65(13), Wis. Stats., and 40 C.F.R. 64.3(b)(3)] 7) The permittee shall compare the data recorded pursuant to condition I.A(1)(c)4) to the operating parameter ranges specified in condition I.A(1)(b)3). An excursion shall be any recorded wet ESP operating parameter value outside of the applicable parameter range specified in condition I.A(1)(b)3). [s. 285.65(13), Wis. Stats., 40 C.F.R. 64.1, and 40 C.F.R. 64.6(c)(2)]	8) The permittee shall maintain records of the actions taken to investigate and resolve any wet ESP operating parameter excursion pursuant to conditions I.A(1)(a)4) and I.A(1)(b)6). [s. 285.65(13), Wis. Stats., and 40 C.F.R. 64.6(c)(2)]
continued)	(b) Compliance Demonstration	5) The permittee shall establish quality assurance and control practices to ensure the continuing validity of the wet electrostatic precipitator operating parameter data specified in conditions I.A(1)(b)3) and I.A(1)(c)4). The permittee shall consider manufacturer	applicable to the monitoring in developing applicable to the monitoring in developing appropriate quality assurance and control practices. [s. NR 407.09(4)(a)1., Wis. Adm. Code, s. 285.65(13), Wis. Stats., and 40 C.F.R. 64.3(b)(3)] 6) The actions taken by the permittee after detecting an excursion my include initial inspection and evaluation, recording that operations returned to normal without operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the appropriate range specified in condition I.A(1)(b)3). [s. 285.65(13), Wis. Stats., and 40 C.F.R. 64.7(d)(1)]	
A. Stack S02; Control C01 & C02; Process P01 & P02 (continued)	(a) Limitations & Requirements	4) Upon detecting an excursion, the permittee shall restore operation of the dryer system to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the preciod of	any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused startup or shutdown conditions). [s. 285.65(13), Wis. Stats., and 40 C.F.R. 64.7(d)(1)]	
A. Stack S02; Co	Pollutant	(1) Particulate Matter & PM10 Emissions (continued)		Continued on Next Page

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Pollutant	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(1) Particulate Matter & PM10 Emissions	9) Unless otherwise specified by the Department, excursions which are caused by excused startup or shutdown conditions, and excursions which occur during the periodic flushes of the wet ESP power grid and collection surfaces are considered excursions with respect to condition I.A(1)(c)10). Excused excursions are not required to be reported as deviations on the semi-annual monitoring reports required by condition I.I(1)(a)1). [s. 285.65(13), Wis. Stats., 40 C.F.R. 64.7(d)(1), and 40 C.F.R. 64.8(a)]
(continued)	10) The permittee shall develop and implement a Quality Improvement Plan pursuant to 40 C.F.R. 64.8 if the duration of unexcused excursions for the wet ESP operating parameters exceeds five (5) percent of dryer system operating time during any semi-annual reporting period. [s. 285.65(13), Wis. Stats., and 40 C.F.R. 64.8(a)]
	changes pursuant to 40 C.F.R. Part 64 if: a) The permittee shall promptly notify the Department and, if necessary, submit a proposed modification to the operation permit to address monitoring changes pursuant to 40 C.F.R. Part 64 if: a) The permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion while providing valid data, or b) The results of compliance or performance testing document a need to modify the existing wet ESP operating parameter ranges. [s. 285.65(13), Wis. Stats., and 40 C.F.R. 64.7(e)]
	a) Summary information on the number, duration, and cause (including unknown cause, if applicable) of any excursions that occurred during the reporting period, and the corrective actions taken; b) Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than down time associated with zero and span or other daily calibration checks, if applicable); c) A description of the actions taken to implement a Quality Improvement Plan during the reporting period as specified in 40 C.F.R. 64.8. Upon completion of a Quality Improvement Plan, the permittee shall include in the next summary report, documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions. [s. 285.65(13), Wis. Stats., and 40 C.F.R. 64.9(a)(2)]

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Pollutant (a) Limitations & Requirements
1) Opacity may not exceed 20% or number 1 on the Ringlemann chart with the following exceptions: a) When combustion equipment is being cleaned or a new fire started, emissions may not exceed number 4 of the Ringlemann chart or 80% opacity for more than 6 minutes in any one hour. Combustion equipment may not be cleaned nor a fire started more than three times per day. b) For stated periods of time, as permitted by the Department, for such purposes as an operating test, use of emergency equipment, or other good cause, provided no hazard or unsafe condition arises. [ss. NR 431.05, & NR 407.09(2)(d), Wis. Adm. Code]

⁵ The 20 percent opacity limit was established in Permit No. 91-MWH-094 and retained in Permit No. 05-MDW-024.

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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(3) Carbon Monoxide Continued on Next Page	1) Emissions may not exceed: ⁶ a) 15.0 pounds per ton of dry fuel when burning wood; b) 0.69 pound per million BTU (mmBTU) of heat input when burning natural gas. [ss. 285.65(7), Wis. Stats., and NR 405.02(27), & NR 407.09(2)(d), Wis. Adm. Code] 2) The total wood fuel usage for the dryer system (P01 and P02) may not exceed 1762 tons of dry wood fuel per month, as determined by the average over the previous 12 consecutive months. ⁷ [ss. 285.65(7), Wis. Stats., and NR 405.02(27), & NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall perform compliance emission testing of carbon monoxide emissions from Stack S02, while burning wood fuel in both dryer burners, to demonstrate compliance with the carbon monoxide emission limit in condition I.A(3)(a)1): a) Biennial testing shall be conducted as long as the permit remains valid. b) Each biennial test of carbon monoxide emissions shall be performed within 90 days of September 1st of odd numbered years, or within 90 days of an alternate date specified by the Department in writing. c) The permittee may request and the Department may approve a waiver from the required biennial testing provided the results of the most recently completed biennial test demonstrate that the carbon monoxide emissions are 50 percent or less of the applicable limitation in condition I.A(3)(a)1). d) The testing shall be conducted in accordance with the conditions in condition I.I(3)(a)1). [ss. NR 407.09(4)(a)1., NR 439.075(4)(a)1.b., Wis. Adm. Code]	1) Reference Test Method for Carbon Monoxide Emissions: Whenever carbon monoxide emission testing is required, the permittee shall use U.S. EPA Method 10, 10A, or 10B, unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(4), Wis. Adm. Code] 2) The permittee shall retain a copy of the results from each compliance emission test conducted pursuant to condition I.A(3)(b)1). [s. NR 439.04(1)(a), Wis. Adm. Code] 3) The permittee shall keep the following records for the fuels burned by the dryer system: a) Daily records of the amount of dry wood fuel burned in tons and natural gas burned in million cubic feet; b) Monthly records of the average amount of dry wood fuel burned in tons and natural gas burned in million cubic feet; c) Monthly records of the average amount of dry wood fuel burned in tons and natural gas burned in million cubic feet; c) Monthly records of the average amount of dry consecutive months. [s. NR 439.04(1)(d), Wis. Adm. Code]

⁶ The permittee requested these emission limitations so that the facility would remain a synthetic minor source under the Prevention of Significant Deterioration (PSD) program. The 15.0 pound per ton of dry fuel limit for burning wood was established in Permit No. 05-MDW-024 and superseded the 21.8 pound per ton of dry fuel limit established in Permit No. 91-MWH-094. The natural gas limit was established in Permit No. 91-MWH-094 in Permit No. 05-MDW-024.

program. The 1762 tons of dry fuel per month limit was established in Permit No. 05-MDW-024 and superseded the 1629 tons of dry fuel per month limit established in Permit No. 05-MDW-024 and superseded the 1629 tons of dry fuel per month limit established in Permit No. 91-MWH-094. The permittee requested a wood fuel usage limitation so that the facility would remain a synthetic minor source under the Prevention of Significant Deterioration (PSD)

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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(3) Carbon Monoxide	3) The total natural gas usage for the dryer system (P01 and P02) may not exceed 1.0 million cubic feet (CF6) per month, as determined by the average	2) The permittee shall monitor the following exhaust gas parameters, while burning wood fuel, for a minimum of 10 minutes every 8 hours or once per shift, whichever vields the greater minuher of measurements.	4) The permittee shall keep records of the following exhaust gas parameters for the burner pursuant to conditions I.A(3)(b)2) and 4):
(continued)	over the previous 12 consecutive months. [ss. 285.65(7), Wis. Stats., and NR 405.02(27), & NR 407.09(2)(d), Wis. Adm. Code]	a) flue gas temperature; b) oxygen concentration; c) carbon monoxide concentration. [s. NR 407.09(4)(a)1., Wis. Adm. Code]	b) oxygen concentration; c) carbon monoxide concentration. [s. NR 439.04(1)(d), Wis. Adm. Code]
	4) Good Combustion Practices for Burning Wood Fuel: ⁹ a) The temperature of the exhaust gas exiting the boiler shall be	3) The permittee shall measure the parameters listed in condition I.A(3)(b)2) at the burner exit. [s. NR 407.09(4)(a)1., Wis. Adm. Code]	5) If the carbon monoxide concentration exceeds the value in condition I.A(3)(a)4)c), the permittee shall evaluate the carbon monoxide concentration of the exhaust gases exiting the burner at least once each hour until:
	maintained at a minimum of 1250 degrees Fahrenheit. b) The residence time of the burner shall be a minimum of 1 second. c) The 8-hour average carbon monoxide concentration of the	4) If the carbon monoxide concentration exceeds the value in condition I.A(3)(a)4)c), the permittee shall follow the monitoring procedures in condition I.A(3)(c)5). [s. NR 407.09(4)(a)1., Wis. Adm. Code]	 a) The carbon monoxide concentration remains below the value in condition I.A(3)(a)4)c) for three consecutive hourly evaluations; b) The burner is shut down. [s. NR 439.04(1)(d), Wis. Adm. Code]
	exhaust gas exiting the burner may not exceed 600 parts per million dry volume (ppmdv) at 7% oxygen (O ₂). [s. NR 426.03, Wis. Adm. Code]	·	6) The permittee shall keep records of the design residence time for the dryer burners. [s. NR 439.04(1)(d), Wis. Adm. Code]

The permittee requested a natural gas usage limitation so that the facility would remain a synthetic minor source under the Prevention of Significant Deterioration (PSD) program. The 1.0 million cubic feet per month limit was established in Permit No. 05-MDW-024 and superseded the 0.5875 million cubic feet per month limit established in Permit No. 91-MWH-094.

⁹ Good combustion practices mean those practices, which provide for a minimization of emissions of carbon monoxide and hazardous air contaminants. The requirements outlined here were determined by the Department to be good combustion practices for burning wood fuel.

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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
Organic Compounds	(LACT) and operating practices that demonstrate best current technology apply to the dryer system and have been determined to be: 10 determined product; b) A maximum daily average inlet temperature of 1000°F for each dryer, determined daily over the hours each dryer operates; c) A maximum instantaneous inlet temperature of 1200°F for each dryer; d) The use of a wet electrostatic precipitator control system; e) The wood processed by the facility shall be at least 90 percent aspen or other hardwoods. [ss. 285.65(7), Wis. Stats., and NR 424.03(2)(c), & NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall perform compliance emission testing of volatile organic compound (VOC) emissions from Stack S02, while burning wood fuel in both dryer burners, to demonstrate compliance with the VOC emission limit in condition I.A(4)(a)1)a): a) Biennial testing shall be conducted as long as the permit remains valid. b) Each biennial test of VOC emissions shall be performed within 90 days of September 1st odd odd at specified by the Department in writing. c) The permittee may request and the Department may approve a waiver from the required biennial testing provided the results of the most recently completed biennial test demonstrate that the VOC emissions are 50 percent or less of the applicable limitation in condition I.A(4)(a)1)a). d) The testing shall be conducted in accordance with the conditions in condition I.I(3)(a)1). [ss. NR 407.09(4)(a)1., NR 439.075(4)(a)1.b., Wis. Adm. Code] 2) The permittee shall calibrate, maintain, and operate a device to measure and record the dryer inlet temperature on a continuous basis for each wafer dryer. [s. NR 407.09(4)(a)1., Wis. Adm. Code] 3) Same as particulate matter. See conditions I.A(1)(b)2) through 4) above.	1) Reference Test Method for Volatile Organic Compound Emission Rates: Whenever emission testing of volatile organic compound (VOC) emission concentrations or emission rates is required, the permittee shall use U.S. EPA Method 18, 25, 25A, or 25B, unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(3)(a), Wis. Adm. Code] 2) The permittee shall retain a copy of the results from each compliance emission test conducted pursuant to condition I.A(4)(b)1). [s. NR 439.04(1)(a), Wis. Adm. Code] 3) The permittee shall maintain records of the dryer inlet temperature for each wafer dryer. [s. NR 439.04(1)(d), Wis. Adm. Code] 4) The permittee shall keep monthly records of: a) The amount of wood delivered to the facility in cords; and b) The percentage of wood received that is aspen or other hardwoods. [s. NR 439.04(1)(d), Wis. Adm. Code] 5) Same as particulate matter. See conditions I.A(1)(c)4) and 5) above.

The permittee requested that the emission limit be reduced from 1.65 pounds per ton of finished product to 1.2 pounds per ton of finished product in Permit No. 05-MDW-024. LACT and best operating practices were originally established in Permit No. 91-MWH-094 and were determined to apply because 85 percent control of VOC emissions from the dryer system was determined to be technologically infeasible.

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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(5) Formaldehyde	 Best Available Control Technology (BACT) applies to the dryer system. BACT has been determined to be: a) An emission limit of 0.25 pound of formaldehyde per ton of finished product; b) Good Combustion Practices for Burning Wood Fuel:	1) The permittee shall perform compliance emission testing of formaldehyde emissions from Stack S02, while burning wood fuel in both dryer burners, to demonstrate compliance with the formaldehyde emission limit in condition I.A(5)(a)1)a): a) Biemnial testing shall be conducted as long as the permit remains valid. b) Each biemnial test of formaldehyde emissions shall be performed within 90 days of September 1st of odd numbered years, or within 90 days of an alternate date specified by the Department in writing. c) The permittee may request and the Department may approve a waiver from the required biennial testing provided the results of the most recently completed biennial test demonstrate that the formaldehyde emissions are 50 percent or less of the applicable limitation in condition I.A(5)(a)1). d) The testing shall be conducted in accordance with the conditions in condition I.I(3)(a)1). [ss. NR 407.09(4)(a)1., NR 439.07, NR 439.075(1), NR 439.075(3)(b), & NR 439.075(4)(a)1.b., Wis. Adm. Codel	1) Reference Test Method for Formaldehyde Emission Rates: Whenever formaldehyde emission testing is required, the permittee shall use U.S. EPA Method 0011 or the NCASI Chilled Impinger Method (CIM), unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(8), Wis. Adm. Code] 2) The permittee shall retain a copy of the results from each compliance emission test conducted pursuant to condition I.A(5)(b)1). [s. NR 439.04(1)(a), Wis. Adm. Code] 3) Same as carbon monoxide. See conditions I.A(3)(b)4) through 6) above.
Continued on Next Page	dryer, determined daily over the hours each dryer operates; Continued on Next Page	2) Same as carbon monoxide. See conditions I.A(3)(b)2) through 4) above.	

0.25 pound per ton of finished product in Permit No. 05-MDW-024 based on emission testing done by the company. Good combustion practices mean those practices, which provide for a minimization of emissions of carbon monoxide and hazardous air contaminants. The requirements outlined as a part of BACT for formaldehyde were determined by the Department to be good combustion practices for burning wood fuel. 11 BACT was originally established in Permit No. 91-MWH-094 and included an emission limit of 0.475 pound per ton of finished product. The emission limit was reduced to

A. Stack S02; Control C01 & C02; Process P01 & P02 (continued)

Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(5) Formaldehyde	d) A maximum instantaneous inlet temperature of 1200°F for each dryer;	3) Same as volatile organic compounds. See condition I.A(4)(b)2) above.	4) Same as volatile organic compounds. See condition I.A(4)(c)3) above.
(continued)	e) The use of a wet electrostatic precipitator control system; [ss. NR 445.08(3)(a)1., and NR 407.09(2)(d), Wis. Adm. Code]	4) Same as particulate matter. See conditions I.A(1)(b)2) through 4) above.	5) Same as particulate matter. See conditions I.A(1)(c)4) and 5) above.
(6) Stack Parameters	1) Stack S02 shall meet the following requirements: ¹² a) The stack height shall be at least 100.0 feet above ground level; b) The stack inside diameter at the outlet may not exceed 5.0 feet; c) The stack may not be equipped with a rainhat or other device that impedes the upward flow of exhaust gases while the process is operating. [ss. 285.63(1)(b), Wis. Stats., and NR 404.08(2), & NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall maintain the records required by condition I.A(6)(c)1). [s. NR 407.09(4)(a)1., Wis. Adm. Code]	1) The permittee shall keep and maintain on site, technical drawings, blueprints or equivalent records of the physical stack parameters for Stack S02. [s. NR 439.04(1)(d), Wis. Adm. Code]

¹² The stack parameter requirements were established in Permit No. 05-MDW-024 and are included in the permit because the source was reviewed with these stack parameters and it was determined that no ambient air quality standards would be violated when operated using the modeled emission rates and existing stack parameters.

B. Stack S03; Control C03 & C04; Boiler B03 – Geka thermal oil heater rated at 30.0 million BTU per hour. Controlled by a cyclone and baghouse.

Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(1) Particulate Matter & PM10 Emissions Continued on Next Page	1) Emissions from Stacks S03 and S09 may not exceed: a) 0.10 pounds of particulate matter per million BTU of heat input; b) 2.25 pounds per hour. [ss. 285.63(1)(b), Wis. Stats., and NR 440.207(4)(b)1., & NR 404.05(3)(a), Wis. Adm. Code]	1) The permittee shall conduct a compliance emission test of the particulate matter emissions from Boiler B03, while burning wood fuel, within 90 days of 1 November 2007, or within 90 days of an alternate date specified by the Department in writing, to demonstrate compliance with the emission limit in condition I.B(1)(a)1). [s. NR 407.09(4)(a)1., Wis. Adm. Code] 2) The permittee shall use the baghouse (C03) to control emissions at all times the boiler is burning wood fuel. [s. NR 407.09(1)(a), Wis. Adm. Code] 3) The permittee shall maintain the pressure drop across the baghouse between 2.0 and 12.0 inches of water column. [s. NR 407.09(4)(a)1., Wis. Adm. Code]	1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H, 5I, or 17, including condensible backhalf emissions (U.S. EPA Method 202), unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(1), Wis. Adm. Code] 2) The permittee shall retain a copy of the results from each compliance emission test conducted pursuant to condition I.B(1)(b)1). [s. NR 439.04(1)(a), Wis. Adm. Code] 3) The permittee shall measure and record the pressure drop across the baghouse once for every eight (8) hours of boiler operation, or once per day that the boiler is operated, whichever yields the greater number of measurements. [s. NR 439.055(2)(b), Wis. Adm. Code] 4) The permittee shall keep records of: a) the date, time, and initials of the person performing the inspections required by condition I.B(1)(b)4); b) a list of the items inspected; and c) any maintenance or repairs performed as a result of these inspections.

The 2.25 pound per hour emission limit is based on modeling, was established in Permit No. 91-MWH-094, and was retained in Permit No. 05-MDW-024 so that the source would not exceed the allowable Prevention of Significant Deterioration (PSD) increment for PM10 emissions. The 2.25 pound per hour emission limit is more restrictive than the allowable emission limit of 0.10 pound per million BTU of heat input when the thermal oil heater is operating above 22.5 million BTU per hour. However, the 0.10 pound per million BTU limit is more restrictive when the thermal oil heater is operating below 22.5 million BTU per hour.

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Pollutant	Pollutant (a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(1) Particulate Matter & PM10 Emissions (continued)	2) The permittee may burn only: a) wood fuel as the primary fuel in Boiler B03; ¹⁴ b) oil contaminated wood fuel and waste paint as alternate fuels in Boiler B03. ¹⁵ [ss. 285.65(3), & 285.63(1)(a), Wis. Stats.] 3) The permittee may not burn more than 5.0 tons of oil contaminated wood fuel per month in Boiler B03. The amount of wood in the oil contaminated wood fuel shall be added to the amount of wood fuel burned by Boiler B03 to demonstrate compliance with the wood fuel usage limit in condition I.B(3)(a)2). ¹⁶ [ss. 285.65(3), & 285.63(1)(a), Wis. Stats., and NR 407.09(2)(d), Wis. Adm. Code] 4) The permittee may not burn more than 7.5 tons of waste paint per month in Boiler B03. ¹⁷ [ss. 285.65(3), & 285.63(1)(a), Wis. Stats., and NR 407.09(2)(d), Wis. Adm. Code]	 4) The permittee shall perform periodic internal inspections of the baghouse to ensure that the control equipment is operating properly. Inspections shall be performed at least once per calendar year and the interval between inspections may not be closer than six (6) months. These inspections, shall include, but not be limited to inspections, and maintenance/ repairs (as necessary) of: a) valves, hatches, dampers, and gaskets for signs of air infiltration; and b) bag condition, tension, and signs of clean side dust deposits. [s. NR 407.09(4)(a)1., Wis. Adm. Code] 	5) The permittee shall keep daily records of the amount of wood fuel burned by Boiler B03 in tons. [s. NR 440.207(9)(g), Wis. Adm. Code] 6) The permittee shall maintain the records required by condition I.B(1)(c)5) for a period of 2 years following the date of such record. [s. NR 440.207(9)(i), Wis. Adm. Code] 7) The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the boiler or any malfunction of the air pollution control equipment. [s. NR 440.07(2), Wis. Adm. Code] 8) The permittee shall keep monthly records of the amount of oil contaminated wood fuel and waste paint burned in tons. [s. NR 439.04(1)(d), Wis. Adm. Code]

¹⁴ According to section NR 440.207(2)(zm), Wis. Adm. Code, wood fuel "means wood, wood residue, bark or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sander dust, wood chips, scraps, slabs, millings, shavings and processed pellets made from wood or other forest residues."

15 Oil contaminated wood fuel is wood fuel contaminated with hydraulic oil, thermal oil, motor oil, diesel fuel, and/ or gear oil. Waste paint is the waste material generated from the flushing and cleaning of paint system components. 16 Oil contaminated wood fuel was approved as an alternate fuel by the Department in a letter dated 28 February 1996. The limit on the amount of oil contaminated wood fuel that can be burned in the boiler on a monthly basis was established in the letter and retained in Permit Nos. 735057950-P01 and 05-MDW-024.

Waste paint was approved as an alternate fuel by the Department in a letter dated 12 August 1996. The limit on the amount of waste paint that can be burned in the boiler on a monthly basis was established in Permit No. 735057950-P01 and retained in Permit No. 05-MDW-024.

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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
Emissions Emissions Continued on Next Page	1) Emissions may not exceed 20 percent opacity on a 6-minute average basis, except for one 6-minute period per hour of not more than 27 percent opacity. ¹⁸ [s. NR 440.207(4)(c), Wis. Adm. Code] 2) The opacity limitations in condition 1.B(2)(a)1) apply at all times, except during periods of startup, shutdown or malfunction. [ss. NR 440.207(4)(d), and NR 440.11(3), Wis. Adm. Code] 3) The following exceptions to the 20 percent opacity limit in condition I.B(2)(a)1) apply to Boiler B03 unless these exceptions are less restrictive than the requirements in conditions I.B(2)(a)1) and 2): a) When combustion equipment is being cleaned or a new fire started, emissions may not exceed number 4 of the Ringlemann chart or 80% opacity for more than 6 minutes in any one hour. Combustion equipment may not be cleaned nor a fire started more than three times per day. b) For stated periods of time, as permitted by the Department, for such purposes as an operating test, use of emergency equipment, or other good cause, provided no hazard or unsafe condition arises. [ss. NR 440.10(2), and NR 431.05, Wis. Adm. Code]	1) The permittee shall calibrate, maintain, and operate the continuous opacity monitoring system (COMS) required by condition I.B(2)(a)5) in accordance with the provisions and requirements of Performance Specification 1 in 40 CFR part 60, Appendix B. The span value of the COMS shall be between 60 and 80 percent. [s. NR 440.207(8)(b), Wis. Adm. Code] 2) The continuous opacity monitoring system (COMS) required by condition I.B(2)(a)5) shall be in continuous operation when Boiler B03 is operating except for system breakdowns, repairs, calibration checks, and zero and span adjustments. [ss. NR 439.09(8), and NR 439.095(6), Wis. Adm. Code] 3) Unless otherwise approved by the Department, minimum procedures for the continuous opacity monitoring system (COMS) required by condition I.B(2)(a)5) shall include a method for producing a simulated zero opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry, including the lamp and photodetector assembly. [ss. NR 407.09(4)(a)1., and NR 440.13(4)(b), Wis. Adm. Code]	1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9, unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code] 2) The continuous opacity monitoring system (COMS) required by condition I.B(2)(a)5) shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. [ss. NR 439.09(9)(a), and NR 440.13(5)(a), Wis. Adm. Code] 3) The permittee shall reduce all data from the continuous opacity monitoring system (COMS) required by condition I.B(2)(a)5) to 6 minute averages calculated from 36 or more points equally spaced over each 6 minute period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments may not be included in the computed data averages. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form. [s. NR 440.13(8), Wis. Adm. Code]

The visible emission limit was originally established in Permit No. 91-MWH-094 and retained in Permit No. 05-MDW-024.

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	(b) Compuance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
nt rce,	4) The permittee shall clean the optical surfaces exposed to the emissions prior to performing the zero and span drift adjustments, except that for systems using	4) Unless otherwise specified by the Department, periods of excess emissions shall be any 6 minute period during which the average opacity exceeds the applicable emission limit except as allowed by conditions I.B(2)(a)2) and I.B(2)(a)3). [s. NR
consistent with good air pollution control practices for minimizing emissions at all times, including periods of startup, shutdown, and malfunction. [s. NR 440.11(4), Wis. Adm. Code] 5) The permittee shall calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. [s. NR 440.207(8), Wis. Adm. Code] 6) The continuous opacity monitoring system (COMS) required by condition 1.B(2)(a)5) shall be installed such that representative measurements of opacity are obtained. [s. NR 440.13(6), Wis. Adm. Code]	automatic zero adjustments the optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity. [ss. NR 407.09(4)(a)1., and NR 440.13(4)(a), Wis. Adm. Code] 5) The permittee shall follow a quality control and quality assurance plan as approved by the Department for the continuous opacity monitoring system (COMS) required by condition I.B(2)(a)3). [ss. NR 407.09(4)(a)1., NR 439.09(8), & NR 439.095(6), Wis. Adm. Code]	 5) The permittee shall submit excess emission reports for any calendar quarter for which there are excess emissions. If there are no excess emissions during the calendar quarter, the permittee shall submit a semi-annual report stating that no excess emissions occurred during the semi-annual reporting period. [s. NR 440.207(9)(c), Wis. Adm. Code] 6) The excess emission reports required by condition I.B(2)(c)5) shall contain the information identified in condition I.I(5)(a)1)b). [s. NR 439.09(10)(a), Wis. Adm. Code] 7) The permittee shall submit to the Department the results of any performance evaluation of the continuous opacity monitoring system (COMS) using the applicable performance specifications in Appendix B of 40 CFR part 60. [s. NR 440.207(9)(b), Wis. Adm. Code]
dow 40, 1, 1 6 st 7 peri	w, and malfunction. Wis. Adm. Code] nall calibrate, ate a continuous system (COMS) for ity of the emissions tmosphere and record stem. [s. NR dm. Code] opacity monitoring quired by condition installed such that surements of opacity R 440.13(6), Wis.	3 5 5 5

B. Stack S03; Control C03 & C04; Boiler B03 (continued)

Pollutant (a	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(3) Carbon 1) Er Monoxide pounn [ss. 2 405.0] Adm Adm deter previ [ss. 2 17 than deter previ [ss. 2 405.0] Continued on Next Page	1) Emissions may not exceed 6.0 pounds per ton of dry fuel. [ss. 285.65(7), Wis. Stats., and NR 405.02(27), & NR 407.09(2)(d), Wis. Adm. Code] 2) The permittee may not burn more than 520.0 tons of dry fuel per month as determined by the average over the previous 12 consecutive months. [ss. 285.65(7), Wis. Stats., and NR 405.02(27), & NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall perform compliance emission testing of carbon monoxide emissions from Stack S03, while burning wood fuel in the thermal oil heater, to demonstrate compliance with the carbon monoxide emission limit in condition I.B(3)(a)1): a) Biennial testing shall be conducted as long as the permit remains valid. b) Each biennial test of carbon monoxide emissions shall be performed within 90 days of November 1st of odd numbered years, or within 90 days of an alternate date specified by the Department in writing. c) The permittee may request and the Department may approve a waiver from the required biennial testing provided the results of the most recently completed biennial test demonstrate that the carbon monoxide emissions are 50 percent or less of the applicable limitation in condition I.B(3)(a)1). d) The testing shall be conducted in accordance with the conditions in condition I.I(3)(a)1). [5s. NR 407.09(4)(a)1., NR 439.07, NR 439.075(1), NR 439.075(3)(b), and NR 439.075(4)(a)1.b., Wis. Adm. Code]	1) Reference Test Method for Carbon Monoxide Emissions: Whenever carbon monoxide emission testing is required, the permittee shall use U.S. EPA Method 10, 10A, or 10B, unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(4), Wis. Adm. Code] 2) The permittee shall retain a copy of the results from each compliance emission test conducted pursuant to condition I.B(3)(b)1). [s. NR 439.04(1)(a), Wis. Adm. Code]

The permittee requested this emission limitation so that the facility would remain a synthetic minor source under the Prevention of Significant Deterioration (PSD) program. The 6.0 pound per ton of dry fuel limit was established in Permit No. 05-MDW-024 and superseded the 7.5 pound per ton of dry fuel limit established in Permit No. 91-MWH-094.

program. The 520.0 tons of dry fuel per month limit was established in Permit No. 05-MDW-024 and superseded the 480.6 tons of dry fuel per month limit established in Permit No. 91-MWH-094. ²⁰ The permittee requested a wood fuel usage limitation so that the facility would remain a synthetic minor source under the Prevention of Significant Deterioration (PSD)

B. Stack S03; Control C03 & C04; Boiler B03 (continued)	
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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(3) Carbon Monoxide	3) Good Combustion Practices for Burning Wood Fuel: ²¹ a) The temperature of the exhaust gas exiting the boiler shall be	2) The permittee shall monitor the following exhaust gas parameters, while burning wood fuel, for a minimum of 10 minutes every 8 hours or once per shift, whichever yields the	3) The permittee shall keep records of the following exhaust gas parameters for the burner pursuant to conditions I.B(3)(b)2) and 4): a) flue gas temperature:
(continued)	maintained at a minimum of 1250 degrees Fahrenheit. b) The residence time of the burner shall be a minimum of 1 second.	greater number of measurements: a) flue gas temperature; b) oxygen concentration; c) carbon monoxide concentration.	b) oxygen concentration; c) carbon monoxide concentration. [s. NR 439.04(1)(d), Wis. Adm. Code]
	c) The 8-hour average carbon monoxide concentration of the exhaust gas exiting the burner may not exceed 600 parts per million dry volume (ppmdv) at 7% oxygen (O ₂).	 [S. NK 407.09(4)(a)1., Wis. Adm. Code] 3) The permittee shall measure the parameters listed in condition I.B(3)(b)2) at the furnace exit. [s. NR 407.09(4)(a)1., Wis. Adm. Code] 	4) If the carbon monoxide concentration exceeds the value in condition I.B(3)(a)3)c), the permittee shall evaluate the carbon monoxide concentration of the exhaust gases exiting the burner at least once each hour until: a) The carbon monoxide concentration remains below the value in condition I.B(3)(a)3)c) for three consecutive hourty evaluations.
		exceeds the value in condition I.B(3)(a)3)c), the permittee shall follow the monitoring procedures in condition I.B(3)(c)4). [s. NR 407.09(4)(a)1., Wis. Adm. Code]	b) The burner is shut down. [s. NR 439.04(1)(d), Wis. Adm. Code] 5) The permittee shall keep records of the design residence time for the boiler. [s. NR 439.04(1)(d), Wis. Adm. Code]

²¹ Good combustion practices mean those practices, which provide for a minimization of emissions of carbon monoxide and hazardous air contaminants. The requirements outlined here were determined by the Department to be good combustion practices for burning wood fuel.

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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(4) Formaldehyde	 Best Available Control Technology (BACT) applies to Boiler B03.²² BACT has been determined to be: a) An emission limit of 0.017 pound of formaldehyde per hour; b) Good Combustion Practices for Burning Wood Fuel:	1) The permittee shall conduct a compliance emission test of the formaldehyde emissions from Boiler B03, while burning wood fuel, within 90 days of 1 November 2007, or within 90 days of an alternate date specified by the Department in writing, to demonstrate compliance with the emission limit in condition I.B(4)(a)1a). [s. NR 407.09(4)(a)1., Wis. Adm. Code] 2) Same as carbon monoxide. See conditions I.B(3)(b)2) through 4) above.	Bates: Whenever formaldehyde emission testing is required, the permittee shall use U.S. EPA Method 0011 or the NCASI Chilled Impinger Method (CIM), unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(8), Wis. Adm. Code] 2) The permittee shall retain a copy of the results from each compliance emission test conducted pursuant to condition I.B(4)(b)1). [s. NR 439.04(1)(a), Wis. Adm. Code] 3) Same as carbon monoxide. See conditions I.B(3)(c)3) through 5) above.

²² BACT was originally established in Permit No. 91-MWH-094 and included an emission limit of 0.017 pound per hour. BACT was not changed in Permit No. 05-MDW-024. Good combustion practices mean those practices, which provide for a minimization of emissions of carbon monoxide and hazardous air contaminants. The requirements outlined as a part of BACT for formaldehyde were determined by the Department to be good combustion practices for burning wood fuel.

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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(5) Stack Parameters	1) Stack S03 shall meet the following requirements: 23 a) The stack height shall be at least 75.0 feet above ground level; b) The stack inside diameter at the outlet may not exceed 4.33 feet; c) The stack may not be equipped with a rainhat or other device that impedes the upward flow of exhaust gases while the process is operating. [ss. 285.63(1)(b), Wis. Stats., and NR 404.08(2), & NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall maintain the records required by condition I.B(5)(c)1). [s. NR 407.09(4)(a)1., Wis. Adm. Code]	1) The permittee shall keep and maintain on site, technical drawings, blueprints or equivalent records of the physical stack parameters for Stack S03. [s. NR 439.04(1)(d), Wis. Adm. Code]

²³ The stack parameter requirements were established in Permit No. 03-MDW-120, retained in Permit No. 05-MDW-025, and are included in the permit because the source was reviewed with these stack parameters and it was determined that no ambient air quality standards would be violated when using the modeled emission rates and existing stack parameters.

C. Stack S04; Process P04 – Wafer press.

Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(1) Particulate Matter & PM10 Emissions	1) Emissions may not exceed 6.82 pounds per hour from Stack S04.24 [ss. 285.63(1)(b), Wis. Stats., and NR 404.05(3)(a), NR 415.05(2), & NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall perform compliance emission testing of particulate matter emissions from Stack S04, to demonstrate compliance with the particulate matter emission limit in condition I.C(1)(a)1): a) Biennial testing shall be conducted as long as the permit remains valid. b) Each biennial test of particulate matter emissions shall be performed within 90 days of September 1st of odd numbered years, or within 90 days of an alternate date specified by the Department in writing. c) The permittee may request and the Department may approve a waiver from the required biennial testing provided the results of the most recently completed biennial test demonstrate that the particulate matter emissions are 50 percent or less of the applicable limitation in condition I.C(1)(a)1). d) The testing shall be conducted in accordance with the conditions in condition I.I(3)(a)1). [ss. NR 407.09(4)(a)1., NR 439.075(1), NR 439.075(3)(b), and NR 439.075(4)(a)1.b., Wis. Adm. Code]	1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H, 5I, or 17, including condensible backhalf emissions (U.S. EPA Method 202), unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(1), Wis. Adm. Code] 2) The permittee shall retain a copy of the results from each compliance emission test conducted pursuant to condition I.C(1)(b)1). [s. NR 439.04(1)(a), Wis. Adm. Code]

²⁴ The 6.82 pound per hour emission limit was established in Permit No. 91-MWH-094, retained in Permit No. 05-MDW-024, is based on modeling and is included in the permit to protect the National Ambient Air Quality Standards (NAAQS). This emission limit is more restrictive than the allowable emission limit of 17.78 pounds per hour calculated from the process weight rate equation in section NR 415.05(2), Wis. Adm. Code. The allowable emission rate of 17.78 pounds per hour was determined using a process weight rate of 13.20 tons per hour and is more restrictive than the emission limit calculated using the exhaust gas limit in section NR 415.05(1)(o), Wis. Adm. Code.

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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(2) Visible Emissions	1) Opacity may not exceed 20% or number 1 on the Ringlemann chart except for stated periods of time, as permitted by the Department, for such purposes as an operating test, use of emergency equipment, or other good cause, provided no hazard or unsafe condition arises. ²⁵ [ss. NR 431.05, and NR 407.09(2)(d), Wis. Adm. Code]	 The permittee shall perform compliance emission testing of visible matter emissions from Stack S04, to demonstrate compliance with the visible emission limit in condition I.C(2)(a)1): a) Biennial testing shall be conducted as long as the permit remains valid. b) Each biennial test of visible emissions shall be performed within 90 days of September 1st of odd numbered years, or within 90 days of an alternate date specified by the Department in writing. c) The permittee may request and the Department may approve a waiver from the required biennial testing provided the results of the most recently completed biennial test demonstrate that the visible emissions are 50 percent or less of the applicable limitation in condition I.C(2)(a)1). d) The testing shall be conducted in accordance with the conditions in condition I.I(3)(a)1). [ss. NR 407.09(4)(a)1., NR 439.075(1), NR 439.075(3)(b), and NR 439.075(4)(a)1.b., Wis. Adm. Code] 	1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9, unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code] 2) The permittee shall retain a copy of the results from each compliance emission test conducted pursuant to condition I.C(2)(b)1). [s. NR 439.04(1)(a), Wis. Adm. Code]

The visible emission limit was established in Permit No. 91-MWH-094 and retained in Permit No. 05-MDW-024.

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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(3) Carbon Monoxide	1) Emissions may not exceed. ²⁶ a) 0.2 pound of carbon monoxide per ton of finished product; b) 2.70 pounds per hour. [ss. 285.65(7), Wis. Stats., and NR 405.02(27), & NR 407.09(2)(d), Wis. Adm. Code] 2) The production rate of the wafer press may not exceed. ²⁷ a) 13.2 tons of finished product per hour, as determined by the average weekly production rate determined pursuant to condition I.C(3)(c)3)c); and b) 8100 tons of finished product per month, as determined by the average over the previous 12 consecutive months. [ss. 285.65(7), Wis. Stats., and NR 405.02(27), & NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall perform compliance emission testing of carbon monoxide emissions from Stack S04, to demonstrate compliance with the carbon monoxide emission limits in condition I.C(3)(a)1): a) Biennial testing shall be conducted as long as the permit remains valid. b) Each biennial test of carbon monoxide emissions shall be performed within 90 days of September 1st of odd numbered years, or within 90 days of an alternate date specified by the Department in writing. c) The permittee may request and the Department may approve a waiver from the required biennial testing provided the results of the most recently completed biennial test demonstrate that the carbon monoxide emissions are 50 percent or less of the applicable limitations in condition I.C(3)(a)1). d) The testing shall be conducted in accordance with the conditions in condition I.I(3)(a)1). [ss. NR 407.09(4)(a)1., NR 439.075(4)(a)1.b., Wis. Adm. Code]	1) Reference Test Method for Carbon Monoxide Emissions: Whenever carbon monoxide emission testing is required, the permittee shall use U.S. EPA Method 10, 10A, or 10B, unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(4), Wis. Adm. Code] 2) The permittee shall retain a copy of the results from each compliance emission test conducted pursuant to condition I.C(3)(b)1). [s. NR 439.04(1)(a), Wis. Adm. Code] 3) The permittee shall maintain the following production records for the wafer press: a) The number of tons of finished product produced by the wafer press each week; b) The number of hours that the wafer press operated each week; c) The hourly average production rate for each week based on a) and b) above; d) The number of tons of finished product produced by the wafer press each month; e) The monthly average production rate for the previous 12 consecutive months. [s. NR 439.04(1)(d), Wis. Adm. Code]

The permittee requested these emission limitations so that the facility would remain a synthetic minor source under the Prevention of Significant Deterioration (PSD) program. The 2.70 pound per hour emission limit established in Permit No. 05-MDW-024 and superseded the 2.52 pound per hour emission limit established in Permit No. 91-MWH-094. The 0.2 pound per ton of finished product limit was established in Permit No. 91-MWH-094 and retained in Permit No. 05-MDW-024.

²⁷ The permittee requested production limitations so that the facility would remain a synthetic minor source under the Prevention of Significant Deterioration (PSD) program. The 13.2 tons of finished product per hour and 8100 tons of finished product per month limits were established in Permit No. 05-MDW-024 and superseded the 12.6 tons of finished product per hour and the 7674 tons of finished product per month limits established in Permit No. 91-MWH-094.

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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(4) Volatile Organic Compounds	1) Latest Available Control Techniques (LACT) and operating practices that demonstrate best current technology apply to the press system. ²⁸ LACT has been determined to be an emission limit of 1.62 pounds of volatile organic compounds per ton of finished product. [ss. NR 424.03(2)(c), and NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall perform compliance emission testing of volatile organic compound (VOC) emissions from Stack S04, to demonstrate compliance with the VOC emission limit in condition I.C(4)(a)1): a) Biennial testing shall be conducted as long as the permit remains valid. b) Each biennial test of volatile organic compound emissions shall be performed within 90 days of September 1st of odd numbered years, or within 90 days of an alternate date specified by the Department in writing. c) The permittee may request and the Department may approve a waiver from the required biennial testing provided the results of the most recently completed biennial test demonstrate that the volatile organic compound emissions are 50 percent or less of the applicable limitation in condition I.C(4)(a)1). d) The testing shall be conducted in accordance with the conditions in condition I.(3)(a)1). [ss. NR 407.09(4)(a)1., NR 439.075(1), NR 439.075(3)(b), and NR 439.075(4)(a)1.b., Wis. Adm. Code]	1) Reference Test Method for Volatile Organic Compound Emission Rates: Whenever emission testing of volatile organic compound (VOC) emission concentrations or emission rates is required, the permittee shall use U.S. EPA Method 18, 25, 25A, or 25B, unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(3)(a), Wis. Adm. Code] 2) The permittee shall retain a copy of the results from each compliance emission test conducted pursuant to condition I.C(4)(b)1). [s. NR 439.04(1)(a), Wis. Adm. Code]

²⁸ LACT was established in Permit No. 91-MWH-094 and was determined to apply because 85 percent control of VOC emissions from the press system was determined to be technologically infeasible. LACT was retained without changes in Permit No. 05-MDW-024.

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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(5) Formaldehyde	1) Best Available Control Technology (BACT) applies to the wafer press. BACT has been determined to be an emission limit of 0.28 pound of formaldehyde per ton of finished product. ²⁹ [ss. NR 445.08(3)(a)1., & NR 407.09(2)(d), Wis. Adm. Code] 2) The phenol-formaldehyde resin loading may not exceed ten (10) percent of finished product by weight. ³⁰ [ss. 285.65(7), Wis. Stats., and NR 445.08(3)(a)1., & NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall perform compliance emission testing of formaldehyde emissions from Stack S04, to demonstrate compliance with the formaldehyde emission limit in condition I.C(5)(a)1): a) Biennial testing shall be conducted as long as the permit remains valid. b) Each biennial test of formaldehyde emissions shall be performed within 90 days of September 1st of odd numbered years, or within 90 days of an alternate date specified by the Department in writing. c) The permittee may request and the Department may approve a waiver from the required biennial testing provided the results of the most recently completed biennial test demonstrate that the formaldehyde emissions are 50 percent or less of the applicable limitations in condition I.C(5)(a)1). d) The testing shall be conducted in accordance with the conditions in condition I.L(3)(a)1. [ss. NR 407.09(4)(a)1., NR 439.075(4)(a)1.b., Wis. Adm. Code] 2) The permittee shall maintain the records specified in condition I.C(5)(c)4) regarding the use of phenolformaldehyde resins. [s. NR 407.09(4)(a)1., Wis. Adm. Code]	1) Reference Test Method for Formaldehyde Emission Rates: Whenever formaldehyde emission testing is required, the permittee shall use U.S. EPA Method 0011 or the NCASI Chilled Impinger Method (CIM), unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(8), Wis. Adm. Code] 2) The permittee shall retain a copy of the results from each compliance emission test conducted pursuant to condition I.C(5)(b)1). [s. NR 439.04(1)(a), Wis. Adm. Code] 3) The permittee shall maintain Material Safety Data Sheets (MSDSs) or other documentation for each resin containing formaldehyde that includes the formaldehyde content of the resin. [s. NR 439.04(1)(d), Wis. Adm. Code] 4) The permittee shall keep the following records: a) The maximum phenol-formaldehyde resin loading for each month as a percentage of the weight of finished product; b) The total weight of phenol-formaldehyde resin shounds. [s. NR 439.04(1)(d), Wis. Adm. Code]

²⁹ BACT was originally established in Permit No. 91-MWH-094 and was not changed in Permit No. 05-MDW-024.

The resin loading limitation was established in Permit No. 735057950-P01, retained in Permit No. 05-MDW-024, is based on 100 percent solids content in the resin, and was requested by the company to provide flexibility to conduct trials at phenol-formaldehyde resin loadings that are less than or equal to ten (10) percent by weight of finished product.

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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(6) Methylene Diphenyl Diisocyanate (MDI)	1) The MDI resin loading may not exceed twelve (12) percent of finished product by weight. ³¹ [ss. 285.65(7), Wis. Stats., and NR 445.08(2)(a), & NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall maintain the records specified in condition I.C(6)(c)3) regarding the use of MDI resins. [s. NR 407.09(4)(a)1., Wis. Adm. Code]	1) Reference Test Method for MDI Emission Rates: Whenever MDI emission testing is required, the permittee shall use NIOSH Method 2535 unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(8), Wis. Adm. Code] 2) The permittee shall maintain Material Safety Data Sheets (MSDSs) or other documentation for each resin containing MDI that includes the MDI content of the resin. [s. NR 439.04(1)(d), Wis. Adm. Code]
			 3) The permittee shall keep the following records: a) The maximum MDI resin loading for each month as a percentage of the weight of finished product; b) The total weight of MDI resins (based on 100 percent solids in the resin) introduced into the process in pounds. [s. NR 439.04(1)(d), Wis. Adm. Code]
(7) Stack Parameters	1) Stack S04 shall meet the following requirements: a) The stack height shall be at least 100.0 feet above ground level; b) The stack inside diameter at the outlet may not exceed 5.0 feet; c) The stack may not be equipped with a rainhat or other device that impedes the upward flow of exhaust gases while the process is operating. [ss. 285.63(1)(b), Wis. Stats., and NR 404.08(2), & NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall maintain the records required by condition I.C(7)(c)1). [s. NR 407.09(4)(a)1., Wis. Adm. Code]	1) The permittee shall keep and maintain on site, technical drawings, blueprints or equivalent records of the physical stack parameters for Stack S04. [s. NR 439.04(1)(d), Wis. Adm. Code]

³¹ The resin loading limitation was established in Permit No. 735057950-P01, retained in Permit No. 05-MDW-024, is based on 100 percent solids content in the resin, and was requested by the company to provide flexibility to conduct trials at MDI resin loadings that are less than or equal to twelve (12) percent by weight of finished product.

³² The stack parameter requirements were established in Permit No. 05-MDW-024 and are included in the permit because the source was reviewed with these stack parameters and it was determined that no ambient air quality standards would be violated when using the modeled emission rates and the existing stack parameters.

D. Stacks S05 & S06; Processes P05 & P06 – Panel siding line (P05), lap siding line (P06), and associated drying ovens.

Note: The following requirements apply to each process line individually unless otherwise indicated.

Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(1) Particulate Matter Emissions	1) Emissions from Stack S05 may not exceed: a) 0.15 pounds of particulate matter per million BTU of heat input; b) 0.12 pounds per hour. [ss. 285.63(1)(b), Wis. Stats., and NR 415.06(2)(a), NR 404.05(3)(a), & NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee may burn only natural gas in the drying ovens. [ss. 285.65(3), & 285.63(1)(a), Wis. Stats., and NR 407.09(4)(a)1., Wis. Adm. Code]	1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H, 5I, or 17, including condensible backhalf emissions (U.S. EPA Method 202), unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(1), Wis. Adm. Code]
Continued on Next Page	2) Emissions from Stack S06 may not exceed: a) 0.15 pounds of particulate matter per million BTU of heat input; b) 0.45 pounds per hour. ³⁴ [ss. 285.63(1)(b), Wis. Stats., and NR 415.06(2)(a), NR 404.05(3)(a), & NR 407.09(2)(d), Wis. Adm. Code]		2) The permittee shall keep monthly records of the type and amount of fuel burned by the drying ovens. [s. NR 439.04(1)(d), Wis. Adm. Code]

³³ The 0.12 pound per hour emission limit for Stack S05 is based on modeling and was established in Permit No. 05-MDW-024 so that the source would not exceed the allowable Prevention of Significant Deterioration (PSD) increment for PM10 emissions. The 0.12 pound per hour emission limit is more restrictive than the allowable emission limit of 0.15 pound per million BTU of heat input when the curing oven is operating above 0.8 million BTU per hour. However, the 0.15 pound per million BTU limit is more restrictive when the curing oven is operating below 0.8 million BTU per hour.

³⁴ The 0.45 pound per hour emission limit for Stack S06 is based on modeling and was established in Permit No. 05-MDW-024 so that the source would not exceed the allowable Prevention of Significant Deterioration (PSD) increment for PM10 emissions. The 0.45 pound per hour emission limit is more restrictive than the allowable emission limit of 0.15 pound per million BTU of heat input when the curing ovens are operating above 3.0 million BTU per hour. However, the 0.15 pound per million BTU limit is more restrictive when the curing ovens are operating below 3.0 million BTU per hour.

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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(1) Particulate Matter Emissions (continued)	3) The profiler baghouse that services the saws and profilers on the panel siding line (P05) and the lap siding line (P06) shall be vented inside the plant. This baghouse may only vent to the atmosphere during emergency situations or to protect worker health. Notification shall be made to the Department by the next business	 2) The permittee shall maintain the records specified by condition I.D(1)(c)4). [s. NR 407.09(4)(a)1., Wis. Adm. Code] 3) The permittee shall keep and maintain on site the operator's manual 	 3) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records for the profiler baghouse that include the normal and emergency exhaust points. [s. NR 439.04(1)(d), Wis. Adm. Code] 4) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records for the paint
	day following the start of any emergency episode that requires the profiler baghouse to be vented to the atmosphere. ³⁵ [ss. 285.63(1)(b), Wis. Stats., and NR 404.08(2), & NR 407.09(2)(d), Wis. Adm. Code]	for each paint application system. [s. NR 407.09(4)(a)1., Wis. Adm. Code]	application systems that include the normal and emergency exhaust points. [s. NR 439.04(1)(d), Wis. Adm. Code]
	4) The paint application equipment used on the panel siding line (P05) and the lap siding line (P06) shall be: a) vented through filtration devices and exhausted inside the plant; or b) designed to operate in a manner that does not create particulate overspray. [s. 285.65(7), Wis. Stats.]		

35 The requirement to vent the profiler baghouse inside the plant was established in Permit No. 03-MDW-120, retained in Permit No. 05-MDW-024, is based on modeling and is included in the permit to protect the National Ambient Air Quality Standards (NAAQS).

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(c) Reference Test Methods, Recordkeeping and Monitoring Requirements	1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9, unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code] 2) Same as particulate matter. See conditions I.D(1)(c)2) through 4) above.
(b) Compliance Demonstration	1) Same as particulate matter. See conditions I.D(1)(b)1) through 3) above.
(a) Limitations & Requirements	1) Opacity may not exceed 20% or number 1 on the Ringlemann chart with the following exceptions: 36 a) When combustion equipment is being cleaned or a new fire started, emissions may not exceed number 4 of the Ringlemann chart or 80% opacity for more than 6 minutes in any one hour. Combustion equipment may not be cleaned nor a fire started more than three times per day. b) For stated periods of time, as permitted by the Department, for such purposes as an operating test, use of emergency equipment, or other good cause, provided no hazard or unsafe condition arises. [ss. NR 431.05, and NR 407.09(2)(d), Wis. Adm. Code]
Pollutant	(2) Visible Emissions

36 The visible emission limitation was established in Permit No. 03-MDW-120 and retained in Permit No. 05-MDW-024.

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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
Organic Compounds	1) Latest Available Control Techniques (LACT) and operating practices that demonstrate best current technology apply to the panel siding line (P05) and the lap siding line (P06) and have been determined to be: ³⁷ a) The use of high volume, low pressure (HVLP) paint application equipment approved in writing by the Department; b) The use of coatings with a VOC content less than 0.20 pound per gallon, as received; and c) The use of not more than 29,805 gallons of coatings per month on P05 and P06 combined. [ss. NR 424.03(2)(c), and NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall keep and maintain on site the operator's manual for each paint application system. [s. NR 407.09(4)(a)1., Wis. Adm. Code] 2) The permittee shall maintain the records specified in condition I.D(3)(c)4). Until sufficient records have been accumulated to establish compliance through the averaging period in condition I.D(3)(a)1)c), compliance shall be determined in the following manner. In the first month of operation, paint usage may not exceed the limit in condition I.D(3)(a)1)c). After the second month, the average paint usage shall be determined to be the total paint usage for the last two months divided by 2, not to exceed the limit in condition I.D(3)(a)1)c). After the third month, the average paint usage shall be determining the average paint usage shall be determining the average paint usage shall be used for the first 12 months of operation. For the 13 th month and beyond, the total paint usage for the previous 12 months shall be divided by 12 to obtain the monthly average paint usage, not to exceed the limitation in condition I.D(3)(a)1)c). [s. NR 407.09(4)(a)1., Wis. Adm. Code]	1) Reference Test Method for Volatile Organic Compound Emission Rates: Whenever emission testing of volatile organic compound (VOC) emission concentrations or emission rates is required, the permittee shall use U.S. EPA Method 18, 25, 25A, or 25B, unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(3)(a), Wis. Adm. Code] 2) Reference Test Method for Volatile Organic Compound Content: Whenever the organic solvent content, the volume of solids, the weight of solids, the water content and the density of surface coatings and inks is required, the permittee shall use U.S. EPA Method 24 or 24A, unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(3)(b), Wis. Adm. Code] 3) The permittee shall keep Material Safety Data Sheets (MSDSs) or other similar documents that indicate the VOC content of each coating product in pounds per gallon, as received. [s. NR 439.04(1)(d), Wis. Adm. Code] 4) The permittee shall keep monthly records of: a) The name or identification number of each coating material used; b) The amount of each coating used in gallons; c) The VOC content of each coating; d) The amount of all coatings used in gallons. [s. NR 439.04(1)(a), Wis. Adm. Code]

³⁷ LACT and best operating practices were established in Permit No. 03-MDW-120, retained in Permit No. 05-MDW-024, and were determined to apply because 85 percent control of VOC emissions from the siding lines was determined to be technologically infeasible.

D. Stack S05 & S06; Processes P05 & P06 (continued)

Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements	
Parameters	1) Stacks S05 and S06 shall meet the following requirements: a) The height of Stack S05 shall be at least 35.0 feet above ground level; b) The height of each individual stack making up the composite Stack S06 shall be at least 37.6 feet above ground level; c) The stack inside diameter of Stack S05 at the outlet may not exceed 1.2 feet; d) The stack inside diameter of each individual stack making up the composite Stack S06 may not exceed 0.83 feet at the outlet; e) The stack shall be pointed upward; f) The stack may not be equipped with a rainhat or other device that impedes the upward flow of exhaust gases while the process is operating. [ss. 285.63(1)(b), Wis. Stats., and NR 404.08(2), & NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall maintain the records required by condition I.D(4)(c)1). [s. NR 407.09(4)(a)1., Wis. Adm. Code]	1) The permittee shall keep and maintain on site, technical drawings, blueprints or equivalent records of the physical stack parameters for Stacks S05 and S06. [s. NR 439.04(1)(d), Wis. Adm. Code]	

38 The stack parameter requirements were established in Permit No. 03-MDW-120, retained in Permit No. 05-MDW-024, and are included in the permit because the source was reviewed with these stack parameters and it was determined that no ambient air quality standards would be violated when using the modeled emission rates and existing stack parameters.

E. Stack S09; Boiler B09 - Thermal oil heater rated at 25.2 million BTU per hour while burning natural gas.

(c) Reference Test Methods, Recordkeeping and Monitoring Requirements	1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H, 5I, or 17, including condensible backhalf emissions (U.S. EPA Method 202), unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(1), Wis. Adm. Code] 2) Reference Test Method for PM10 Emissions: Whenever PM10 emission testing is required by the Department, the permittee shall use U.S. EPA Method 201A, unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(1m), Wis. Adm. Code] 3) The permittee shall keep monthly records of the amount of natural gas burned by Boiler B09. ⁴⁰ [ss. NR 440.207(9)(g), and NR 439.04(1)(d), Wis. Adm. Code] 4) The permittee shall keep and maintain a log of when natural gas is fired in Boiler B09. The log shall include: a) the date; b) the start time for natural gas combustion; c) the end time for natural gas combustion. [s. NR 439.04(1)(d), Wis. Adm. Code]
(b) Compliance Demonstration	1) The permittee may burn only natural gas in Boiler B09. [ss. 285.65(3), & 285.63(1)(a), Wis. Stats., and NR 407.09(4)(a)1., Wis. Adm. Code]
(a) Limitations & Requirements	1) Emissions from Stacks S03 and S09 may not exceed: a) 0.10 pounds of particulate matter per million BTU of heat input; b) 2.25 pounds per hour. [ss. 285.63(1)(b), Wis. Stats., and NR 440.207(4)(b)1., NR 404.05(3)(a), & NR 407.09(2)(d), Wis. Adm. Code]
Pollutant	(1) Particulate Matter & PM10 Emissions

would not exceed the allowable Prevention of Significant Deterioration (PSD) increment for PM10 emissions. The 2.25 pound per hour emission limit is more restrictive than the allowable emission limit of 0.10 pound per million BTU of heat input when the thermal oil heater is operating above 22.5 million BTU per hour. However, the 0.10 pound per million BTU limit is more restrictive when the thermal oil heater is operating below 22.5 million BTU per hour. 39 The 2.25 pound per hour emission limit is based on modeling, was established in Permit No. 91-MWH-094, and was retained in Permit No. 05-MDW-024 so that the source

⁴⁰ Daily recordkeeping of the amount of fuel combusted is required by section NR 440.207(9)(g), Wis. Adm. Code. However, USEPA issued a memo on 20 February 1992 stating that monthly recordkeeping is acceptable for affected units that burn only natural gas.

(continued)
B09
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Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
Fmissions	number 1 on the Ringlemann chart with the following exceptions: a) When combustion equipment is being cleaned or a new fire started, emissions may not exceed number 4 of the Ringlemann chart or 80% opacity for more than 6 minutes in any one hour. Combustion equipment may not be cleaned nor a fire started more than three times per day. b) For stated periods of time, as permitted by the Department, for such purposes as an operating test, use of emergency equipment, or other good cause, provided no hazard or unsafe condition arises. [ss. NR 431.05, and NR 407.09(2)(d), Wis. Adm. Code]	1) Same as particulate matter. See condition [LE(1)(b)1) above.	1) Keterence 1 est Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9, unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(9)(a)1., Wis. Adm. Code] 2) Same as particulate matter. See conditions I.E(1)(c)3) and 4) above.

The visible emission limitation was established in Permit No. 91-MWH-094 and retained in Permit No. 05-MDW-024.

E. Stack S09; Boiler B09 (continued)

Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(3) Carbon Monoxide	1) Emissions may not exceed 0.035 pound per million BTU (mmBTU) of heat input when burning natural gas. [ss. 285.65(7), Wis. Stats., and NR 405.02(27), & NR 407.09(2)(d), Wis. Adm. Code] 2) The permittee may not burn more than 6.0 million cubic feet (CF6) of natural gas per month, as determined by the average over the previous 12 consecutive months. ⁴³ [ss. 285.65(7), Wis. Stats., and NR 405.02(27), & NR 407.09(2)(d), Wis. Adm. Code]	1) The permittee shall maintain the records required by condition I.E(3)(c)2). [s. NR 407.09(4)(a)1., Wis. Adm. Code]	1) Reference Test Method for Carbon Monoxide Emissions: Whenever carbon monoxide emission testing is required, the permittee shall use U.S. EPA Method 10, 10A, or 10B, unless an alternative or equivalent method is approved in writing by the Department. [s. NR 439.06(4), Wis. Adm. Code] 2) The permittee shall maintain the following records: a) Monthly records of the amount natural gas burned in million cubic feet; b) Monthly records of the average amount of natural gas burned in million cubic feet during the previous 12 consecutive months. [s. NR 439.04(1)(d), Wis. Adm. Code]

⁴² The permittee requested this emission limitation in Permit No. 91-MWH-094 so that the facility would be a synthetic minor source under the Prevention of Significant Deterioration (PSD) program. The limit was retained in Permit No. 05-MDW-024. ⁴³ The permittee requested a natural gas usage limitation so that the facility would remain a synthetic minor source under the Prevention of Significant Deterioration (PSD) program. The 6.0 million cubic feet per month limit was established in Permit No. 05-MDW-024, superseded the 3.7616 million cubic feet per month limit established in Permit No. 91-MWH-094.

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(c) Reference Test Methods, Recordkeeping and Monitoring Requirements	1) The permittee shall keep and maintain on site, technical drawings, blueprints or equivalent records of the physical stack parameters for Stack S09. [s. NR 439.04(1)(d), Wis. Adm. Code]
(b) Compliance Demonstration	1) The permittee shall maintain the records required by condition I.E(4)(c)1). [s. NR 407.09(4)(a)1., Wis. Adm. Code]
Pollutant (a) Limitations & Requirements	1) Stack S09 shall meet the following requirements: a) The stack height shall be at least 75.0 feet above ground level; b) The stack inside diameter at the outlet may not exceed 3.0 feet; c) The stack shall be pointed upward; d) The stack may not be equipped with a rainhat or other device that impedes the upward flow of exhaust gases while the process is operating. [ss. 285.63(1)(b), Wis. Stats., and NR 404.08(2), & NR 407.09(2)(d), Wis.
Pollutant	(4) Stack Parameters

⁴⁴ The stack parameter requirements were established in Permit No. 03-MDW-120, retained in Permit No. 05-MDW-024, and are included in the permit because the source was reviewed with these stack parameters and it was determined that no ambient air quality standards would be violated when using the modeled emission rates and existing stack parameters.

F. Stack F41; Process P41 – Vehicle traffic on unpaved roadways.

Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
1) Particulate Matter - Fugitive Dust Emissions	1) The permittee may not cause, allow, or permit any materials to be handled, transported, or stored without taking precautions to prevent particulate matter from becoming airborne. Nor may the permittee allow a structure, a parking lot, or a road to be used, constructed, altered, repaired, sand blasted, or demolished without taking such precautions. [s. NR 415.04, Wis. Adm. Code]	1) The permittee shall use good operating practices as outlined in the Fugitive Dust Control Plan required by condition I.I(5)(a)1) to minimize the fugitive dust emissions from the operation of this process. [s. NR 407.09(4)(a)1., Wis. Adm. Code]	1) The permittee shall keep records of any actions taken pursuant to the Fugitive Dust Control Plan required by condition I.I(5)(a)1) to minimize fugitive dust emissions from the operation of this process. [s. NR 439.04(1)(d), Wis. Adm. Code]
(2) Visible Emissions	1) Opacity may not exceed 20% or number 1 on the Ringlemann chart except for stated periods of time, as permitted by the Department, for such purposes as an operating test, use of emergency equipment, or other good cause, provided no hazard or unsafe condition arises. [s. NR 431.05, Wis. Adm. Code]	1) Same as particulate matter. See condition I.F(1)(b)1) above.	1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code] 2) Same as particulate matter. See condition I.F(1)(c)1) above.

G. Stack F42; Process P42 - This process represents the fugitive VOC emissions from the storage, handling, and use of resins at the facility.

Condition Type	(a) Specific Conditions
(1) Volatile Organic Compounds	1) No person may cause, allow, or permit organic compound emissions into the ambient air which substantially contribute to the exceeding of an air standard or cause air pollution. [s. NR 419.03(1), Wis. Adm. Code]
	2) No person may cause allow or permit organic compounds to be used or handled without using good operating practices and taking reasonable precautions to prevent spillage, escape or emission of organic compounds, solvents, or mixtures. Such precautions shall include, but are not limited to use of caution to prevent spillage or leakage when filling tanks, trucks, or trailers. [s. NR 419.03(2), Wis. Adm. Code]

H. Total Facility Limitations

Pollutant	(a) Limitations & Requirements	(b) Compliance Demonstration	(c) Reference Test Methods, Recordkeeping and Monitoring Requirements
(1) Hazardous Air Pollutants (Alternate Operating Scenarios)	1) The permittee may use an alternate fuel or raw material which the source is designed to burn or use if: a) The source has continuously had such design capability; b) The use will not cause or exacerbate the violation of an ambient air quality standard or an ambient air increment; c) The use is not prohibited by any permit, plan approval or special order applicable to the source; d) The use will not result in a violation of any emission limit in chapters NR 405, 408, 409, 415 to 436 and 445; e) The use will not subject the source to any standard or regulation under section 112 of the act (42 USC 7412). [s. NR 406.04(4)(a), Wis. Adm. Code]	1) The permittee shall maintain the records and calculations identified in conditions I.H(1)(c)1) through 3). [s. NR 407.09(4)(a)1., Wis. Adm. Code]	 The permittee shall keep records of any calculations and analysis done pursuant to condition I.H(1)(a)1). S. NR 439.04(1)(d), Wis. Adm. Code] The permittee shall keep records which demonstrate compliance with condition I.H(1)(a)1). NR 439.04(1)(d), Wis. Adm. Code] The permittee shall keep records for each alternate fuel or raw material that is not exempt under chapter NR 445. The records shall include information that can be used for calculating: The potential to emit of any hazardous air pollutant regulated under chapter NR 445 resulting from any alternate fuel or raw material; The facility total potential to emit of each hazardous air pollutant regulated under chapter chapter NR 445 when considering the worst case operating scenario and any permit limitations. S. NR 439.04(1)(d), Wis. Adm. Code]

I. Other Conditions Applicable to the Facility

Condition Type	(a) Specific Conditions
(1) Reporting	1) The permittee shall submit the results of monitoring required by the operation permit to the Department. In lieu of submission of all monitoring results may be submitted to the Department. The summary shall include sufficient data for the Department to determine whether the source is in compliance with the applicable requirements to which the monitoring relates. The semi-annual monitoring reports may be consolidated with the quarterly excess emission reports required under section NR 439.09 and outlined in condition I.I(5)(a)1) when submission of both these reports is required, provided that both reports are submitted within 30 days of the end of the reporting period. a) The time periods to be addressed by the semi-annual reports are January 1 to June 30 and July 1 to December 31. b) The reports shall be submitted to the Northern Region Air Management Program, 107 Sutliff Avenue, Rhinelander, WI 54501 within 60 days after the end of each reporting period. c) The information specified in condition I.A(1)(c)11) shall be included in the semi-annual report, as applicable. d) All deviations from and violations of applicable requirements shall be clearly identified in the report. e) Each semi-annual report shall be certified by a responsible official as to the truth, accuracy, and completeness of the report. [ss. NR 439.03(1)(b), and NR 439.03(10), Wis. Adm. Code]
	 2) The permittee shall submit certification of compliance with the requirements of the operation permit to the Department and U.S. EPA annually. a) The time period to be addressed by the certification of compliance is the January 1 to December 31 period which precedes the certification. b) The certification of compliance shall be submitted to the Northern Region Air Management Program, 107 Sutliff Avenue, Rhinelander, WI 54501 and to Compliance Data - Wisconsin, Air and Radiation Division, U.S. EPA, 77 West Jackson Boulevard, Chicago, IL 60604 within 60 days after the end of the reporting period. c) The information included in the report shall comply with the requirements of Part II, Section N of the operation permit. d) Each certification of compliance shall be certified by a responsible official as to the truth, accuracy, and completeness of the certification. [s. NR 439.03(1)(c), and NR 439.03(10), Wis. Adm. Code]
(2) Recordkeeping	1) The permittee shall retain copies of all records and reports required by the operation permit for a period of 5 years unless otherwise specified by the Department. [s. NR 439.04(2), Wis. Adm. Code] 2) The permittee may maintain records on alternate media, such as microfilm, computer files, magnetic tape disks, or microfiche, instead of paper records, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other recordkeeping requirements. [s. 285.65(13), Wis. Stats., and 40 C.F.R. 64.9(b)(2)]

I. Other Conditions A	I. Other Conditions Applicable to the Facility (continued)
Condition Type	(a) Specific Conditions
(3) Compliance Emission Testing	 1) Whenever compliance emission testing is required by the Department: a) Unless the Department requires or approves the performance of a test at less than capacity, all compliance emission tests shall be performed with the equipment operating at capacity or as close to capacity as practicable. b) The reference test methods outlined in this permit shall be used unless an alternate U.S. EPA approved test method is approved by the Department in writing. c) The Department shall be informed at least 20 working days prior to any stack testing so a Department representative can witness the testing. d) At the time of the notification, a compliance emission test plan shall be submitted to the Northern Region Air Management Program, 107 Sutliff Avenue, Rhinelander, WI 54501 for approval. e) Two copies of the report on the test results shall be submitted to the Northern Region Air Management Program, 107 Sutliff Avenue, Rhinelander, WI 54501 for evaluation within 60 days following the tests. [ss. NR 439.07(1), NR 439.07(2), and NR 439.07(10), Wis. Adm. Code]
	2) Whenever performance testing is required pursuant to the New Source Performance Standards (NSPS) in chapter NR 440, Wis. Adm. Code, the permittee shall: a) Notify the Department in writing at least 30 calendar days before the performance test is scheduled to begin; b) Conduct any performance tests under such conditions as the Department shall specify to the permittee based on representative performance of the affected facility. The permittee shall make available to the Department such records as may be necessary to determine the conditions of the performance tests; c) Submit the results of the performance evaluation to the Northern Region Air Management Program, 107 Sutliff Avenue, Rhinelander, WI, 54501 before the close of business on the 60 th day following the completion of the performance evaluation.
(4) Additional Reference Test Methods	1) Reference Test Method for PM10 Emissions: Whenever PM10 emission testing is required by the Department, the permittee shall use U.S. EPA Method 201 or 201A. [s. NR 439.06(1m), Wis. Adm. Code] 2) Reference Test Method for Sampling and Analysis of Fuels Other Than Coal and Liquid Fossil Fuel: Whenever sampling and analysis of a fuel other than coal and liquid fossil fuel is required, it shall be determined by methods and procedures approved, in writing, by the Department. [s. NR 439.08(3), Wis. Adm. Code]

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Condition Type	(a) Specific Conditions
(5) Excess Emission Reports	 The quarterly excess emission reports required by this permit shall: be submitted to the Northern Region Air Management Program, 107 Sutliff Avenue, Rhinelander, WI 54501 within 30 days of the end of each calendar quarter; b) contain the following information:
	2) If the permittee receives written approval from the Department, the permittee may submit a summary excess emission report in lieu of the full excess emission reports required by this permit. This summary shall be submitted on a form provided by the Department, or in a format approved by the Department. [s. NR 439.09(10)(d), Wis. Adm. Code]
(6) Malfunction Prevention and Abatement Plan	1) The permittee shall prepare and follow a Malfunction Prevention and Abatement Plan for the facility to prevent, detect, and correct malfunctions or equipment failures which may cause any applicable emission limitation to be violated or which may cause air pollution. [s. NR 439.11(1), Wis. Adm. Code]
Nisilo-ka-	2) The permittee shall maintain a written copy of the Malfunction Prevention and Abatement Plan at the facility and update the plan at least once every five years. The plan shall contain all of the elements in section NR 439.11(1)(a) through (h), Wis. Adm. Code. [s. NR 439.11(1), Wis. Adm. Code]
	3) The permittee shall submit a copy of the Malfunction Prevention and Abatement Plan required by condition LI(6)(a)1) to the Northern Region Air Management Program, 107 Sutliff Avenue, Rhinelander, WI 54501 upon request by the Department. [s. NR 439.11(2), Wis. Adm. Code]
	4) The permittee shall operate and maintain all air pollution control equipment in conformance with good engineering practices (i.e. operated and maintained in accordance with the manufacturer's specifications and directions) to minimize the possibility for the exceedance of any emission limitations. [s. NR 439.11(4), Wis. Adm. Code]

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Condition Type	(a) Specific Conditions
(7) Fugitive Dust Control Plan	1) The permittee shall maintain and follow a written fugitive dust control plan for all potential sources of fugitive dust emissions. This plan shall be submitted to the Department upon request. A copy of the plan shall be kept at the facility. [ss. NR 415.03, and NR 407.09(4)(a)1., Wis. Adm. Code]
(8) MACT Standards	1) The permittee shall comply with the applicable requirements in 40 C.F.R. Part 63, Subpart DDDDD (National Emissions Standards for Hazardous Air Pollutants {NESHAP} that establish Maximum Achievable Control Technology (MACT) standards for Industrial, Commercial and Institutional Boilers and Process Heaters) no later than 13 September 2007. [40 C.F.R. 63.7495(b), and s. 285.65(13), Wis. Stats.]
	2) The permittee shall comply with the applicable requirements in 40 C.F.R. Part 63, Subpart DDDD (National Emissions Standards for Hazardous Air Pollutants {NESHAP} that establish Maximum Achievable Control Technology (MACT) standards for Plywood and Composite Wood Products Industry) no later than 1 October 2007. [40 C.F.R. 63.7495(b), and s. 285.65(13), Wis. Stats.]

BEFORE THE DEPARTMENT OF NATURAL RESOURCES

In the Matter of the Proposed Operating Permit

for

EI FACILITY NO.: 735057950

Louisiana-Pacific Corporation, 9300 County Highway S, Tomahawk, Wisconsin, PERMIT NOS.: 05-MDW-024, 05-MDW-024-OP and 735057950-P10

Proposed by the Wisconsin Department of Natural Resources

COMMENTS OF THE SIERRA CLUB REGARDING A PROPOSED PERMIT (05-MDW-024, 05-MDW-024-OP and 735057950-P10) FOR THE LOUISIANA-PACIFIC CORPORATION FACILITY IN TOMAHAWK, WISCONSIN

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Date: May 23, 2005

Sierra Club is submitting these comments on the proposed air pollution control permit(s) for the Louisiana-Pacific facility in Tomahawk, Wisconsin. These comments are provided pursuant to Wis. Stat. § 285.61, et seq, Wis. Admin. Code chs. NR 405, 406, and 407, and 40 C.F.R. § 70.7.

I. THE DNR CANNOT ISSUE THE PERMIT BECAUSE IT FAILS TO INCLUDE CONDITIONS THAT MEET THE LEGAL REQUIREMENTS FOR MONITORING.

The necessary monitoring in Title V permits is strictly regulated by 40 C.F.R. § 70.6(a)(3)(i), which states that

Each permit shall contain the following requirements with respect to monitoring: (A) All monitoring and analysis procedures or test methods required under applicable monitoring and testing requirements, including part 64 of this chapter and any other procedures and methods that may be promulgated pursuant to sections 114(a)(3) or 504(b) of the Act. . . . (B) Where the applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit

Furthermore, 40 C.F.R. § 70.6(c)(1) states that "All part 70 permits shall contain . . . testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit." (emphasis added); see also Wis. Admin. Code § NR 407.09(1)(a) and (c). Additionally, CAA § 504 and 40 C.F.R. § 70.6(a)(3) require that permits indicate the frequency at which testing shall take place. Because many of the monitoring requirements in the permit fail to meet the applicable requirements of the Clean Air Act, the Code of Federal Regulations, and the Wisconsin Administrative Code, the DNR cannot issue the permit(s) as written.

A. The Permit Fails to Require Sufficient Monitoring for Visible Emissions.

Visible emissions from the Louisiana-Pacific facility are regulated by both the general visible emission limits in NR 431 and specific New Source Performance Standard limits in NR 440. Both require that visible emissions not exceed 20% opacity. The Wisconsin State Implementation Plan (SIP) requires one of two methods for monitoring compliance with opacity limits:

- 1. Method 9 in 40 CFR part 60, Appendix A, incorporated by reference in s. NR 484.04 (13).
- 2. Install, calibrate, maintain and operate a continuous emission monitor that meets the applicable performance specifications in 40 CFR part 60, Appendix B or 40 CFR part 75, Appendices A to I, incorporated by reference in s. NR 484.04 (21) and (27), and

follow a quality control and quality assurance plan for the monitor which has been approved by the department.

Wis. Admin. Code § NR 439.06(9)(a); 40 C.F.R. § 52.2570(c)(98)(i). DNR's failure to require one of these two monitoring options violates Wisconsin's SIP. Additionally, DNR's failure to require one of these two methods for determining compliance with visible emission limits violates the requirement that every Part 70 source be subject to sufficient monitoring to assure continuous compliance. CAA § 504 and 40 C.F.R. § 70.6(a)(3). Sierra Club believes that, given the availability and reliability of Continuous Omission Monitoring Systems (COMS) for opacity, this method of monitoring must be required to comply with Part 70.

The following permit sections contain insufficient opacity monitoring:

- Section I.A.(2)(b) fails to require COMS. COMS are necessary to assure continuous compliance.
- Section I.D.(2)(b) fails to require either COMS or Method 9. Instead, it proposes to monitor compliance with the 20% opacity limit by reference to the monitoring requirements for particulate matter. This is insufficient to comply with the requirements of the Wisconsin SIP and 40 C.F.R. Pt. 70.
- Section I.E.(2)(b) fails to require <u>either COMS</u> or Method 9. Instead, it proposes to monitor compliance with the 20% opacity limit by reference to the monitoring requirements for particulate matter. This is insufficient to comply with the requirements of the Wisconsin SIP and 40 C.F.R. Pt. 70.

B. The Permit Lacks the Monitoring Necessary For Particulate Matter Emissions.

There are insufficient monitoring requirements for particulate matter emissions from all of the emission sources at the facility. Continuous Emission Monitoring Systems (CEMS) are necessary to assure continuous compliance with particulate matter emissions. A Title V permit must require sufficient monitoring to <u>assure</u> compliance. CAA § 504 and 40 C.F.R. § 70.6(a)(3). DNR should require CEMS on each emission source to monitor particulate matter emissions. Alternatively, DNR should require COMS for opacity monitoring and require the facility to determine an opacity surrogate for particulate matter emissions. The DNR has done this to comply with the requirements of Part 70 for other facilities. *See* Permit for Genoa Generating Station (FID: 663020930; Permit No. 663020930-P10), § I.A.1.b.(5)(d); *see also* Genoa Compliance Assurance Monitoring Protocol, Dairyland Power Genoa 3 Generating Station/Genoa, Wisconsin.

1) Monitoring for B03.

The Permit also fails to require periodic compliance testing for B03. The permit requires a single compliance stack test for B03 particulate matter emissions. See Permit § I.B.(1)(b). However, it fails to require additional compliance tests on a regular basis. Id. DNR should require CEMS for particulate matter emissions from B03. The facility is permitted to burn a

number of different fuels, including wood, oil-contaminated wood, and waste paint. See Permit § I.B.(1)(a). CEMS is the only monitoring method that will assure continuous compliance when burning any combination of these wastes. Should DNR fail to require CEMS, it must require semi-annual or annual stack tests for particulate matter emissions from B03.

2) Monitoring for P05 and P06.

It should be noted that DNR identifies "U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H, 5I, or 17, including condensible backhalf emissions (U.S. EPA Method 202)" as an appropriate monitoring method during a compliance stack test on P05 and P06, but fails to require compliance stack tests in the permit. See Permit § I.D.(1)(b) and (c). The permit relies upon a single monitoring requirement to ensure compliance with the particular matter limit for P05 and P06: "The permittee may burn only natural gas in the drying ovens." Permit § I.D.(1)(b). This assumption, that fuel choice necessarily achieves compliance, is insufficient to assure compliance. Therefore, the proposed monitoring for P05 and P06 fails to meet the standards of Part 70.

Additionally, fuel restriction for the ovens is insufficient because the natural gas-fired ovens are not the only particulate matter source for P05 and P06. DNR requires that saws and paint spray, which are also particulate matter sources for P05 and P06, be exhausted inside the building as a method of controlling particulate matter emissions. See Permit § I.D.(1)(a). This is insufficient unless the facility monitors all windows, doors, and ventilation openings to ensure that P05 and P06 particulate matter emissions are not escaping through those emission points. Additionally, the permit provides that the facility may "designed to operate in a manner that does not create particulate overspray" as an alternative to ventilating paint spray inside the building. Permit § I.D.(1)(b)(4)b. This requirement is too vague to be practically enforceable. (See discussion regarding practical enforceability below).

C. DNR Must Require Emission Testing for VOC Emissions.

The permit does not require emission testing for VOC emissions from P05 and P06. See Permit § I.D.(3)(b). This must be required to assure compliance with the VOC limits in the permit. Specifically, testing is required to ensure the 85% VOC reduction limit that should apply to the facility, as discussed below.

II. THE PERMIT CONTAINS CONDITIONS THAT VIOLATE THE REQUIREMENTS RELATED TO CREDIBLE EVIDENCE.

The U.S. EPA has the authority to bring enforcement actions "on the basis of any information available to the Administrator." 42 U.S.C. § 7413 (emphasis added). This has been interpreted to mean any "credible evidence" that a court would accept. U.S. EPA Region 9 Title V Permit Review Guidelines, Sept. 9 1999, p. III-46. U.S. EPA has stated that this means that "any credible evidence can be used to show a violation of or, conversely, demonstrate compliance with an emissions limit." *Id.* Permit language may not exclude the use of any data that may provide credible evidence. *Id.* The U.S. EPA views permit conditions providing

enumerated compliance test methods as tacitly excluding the use of other data to demonstrate compliance or noncompliance. This tacit exclusion violates the credible evidence rule. "The permit must specify the source's obligations for monitoring in a way that does not establish an exclusive link between the test method and the emissions limit." *Id.*

The proposed permit for Louisiana-Pacific contains numerous conditions which violate the credible evidence rule. In general, these conditions violate the rule because they specify certain types of data to be used to determine compliance. "Permit language may not [s]pecify that only certain types of data may be used to determine compliance." *Id.* Identifying such data is not necessary according to the U.S. EPA. "In general, the permit should simply tell the source what it must do . . . It is not necessary to say that a term assures compliance or that an activity is required to assure compliance." *Id.* at III-47; see also Credible Evidence Revisions, 62 Fed. Reg. 8314; 40 C.F.R. § 51.212; 40 C.F.R. § 52.23.

The permit divides requirements into four separate columns for: (1) pollutant; (2) numeric limit; (3) compliance demonstration method; and (4) compliance demonstration, monitoring and reporting. See e.g. Permit § I.A.1.a. through c. The Preamble to the Permit states that the "Compliance Demonstration" provisions (column "c" throughout the Permit) lists the methods that "may be used to demonstrate compliance with the associated emission limit or work practice standard." See Permit at p. 4. This provision impermissibly enumerates the evidence to be used to determine compliance. Because this language has the potential to be interpreted as limiting the evidence that can be used to enforce the Permit's limits, it violates the credible evidence rule.

The Permit further defines "Compliance Demonstration." (The permit defines this term twice, see p. 4). The second definition states that the "Compliance Demonstration" column of the permit "contains monitoring and testing requirements and methods to demonstrate compliance with the conditions." This provision appears to limit the "methods to demonstrate compliance" to only those listed in the specific column of the Permit. Again, this violates the credible evidence rule.

Additionally, the Permit defines the "Reference Test Methods, Recordkeeping, and Monitoring" as "Specific USEPA Reference test methods or other approved test methods will be contained in this area and are the methods that <u>must be used</u> whenever testing is required." *See* Permit at p. 4 (emphasis added). This provision limits the evidence to be used to demonstrate compliance and therefore violates the credible evidence rule.

The Permit does contain a vague reference to the "credible evidence" rule, but that reference is insufficient to ensure that credible evidence can be used to enforce the Permit's limits by USEPA, DNR and citizens. The Permit states:

Notwithstanding the compliance determination methods which the owner or operator of a source is authorized to use under ch. NR 439, Wis. Admin. Code, the Department may use any relevant information or appropriate method to determine a source's compliance with applicable emission limits.

Permit at p. 4. There are two significant problems with this apparent attempt to comply with the credible evidence rule:

- 1) The sentence refers to the compliance demonstration methods in Wis. Admin. Code ch. 439, rather than those in the permit. It appears that DNR meant to say that "notwithstanding the provisions of this permit, any relevant information may be used to enforce applicable permit limits." In other words, the provision allowing DNR to use any evidence despite NR 439 does not cure the restrictive evidence provisions in the permit.
- 2) The provision states that "the <u>Department</u> may use any relevant information..." This implies that USEPA and citizens may not use "any relevant information" to enforce the permit.

These problems must be corrected. Additionally, the permit contains other violations of the credible evidence rule, including but not limited to:

- Section I.A.(1)(b)(1) states "The permittee shall perform compliance emission testing of particulate matter emissions from Stack S02, while burning wood fuel in both dryer burners, to demonstrate compliance with the particulate matter emission limit..." By establishing an exclusive link between the test and the emissions limit, the condition unacceptably limits credible evidence.
- Section I.A.(2)(b)(1) states "The permittee shall perform compliance emission testing of visible matter emissions from Stack S02, while burning wood fuel in both dryer burners, to demonstrate compliance with the visible emission limit..." Again, by establishing an exclusive link between the test and the limit, the provision impermissibly limits credible evidence.
- Section I.A.(3)(b)(1) states "The permittee shall perform compliance emission testing
 of carbon monoxide emissions from Stack S02, while burning wood fuel in both dryer
 burners, to demonstrate compliance with the carbon monoxide emission limit..."
 This illegally limits credible evidence.
- Section I.A.(4)(b)(1) states "The permittee shall perform compliance emission testing of volatile organic compound (VOC) emissions from Stack S02, while burning wood fuel in both dryer burners, to demonstrate compliance with the VOC emission limit..." This illegally limits credible evidence.
- Section I.A.(5)(b)(1) states "The permittee shall perform compliance emission testing of formaldehyde emissions from Stack S02, while burning wood fuel in both dryer burners, to demonstrate compliance with the formaldehyde emission limit..." This illegally limits credible evidence.
- Section I.B.(1)(b)(1) states "The permittee shall conduct a compliance emission test of the particulate matter emissions from Boiler B03, while burning wood fuel, within

90 days of 1 September 2007, or within 90 days of an alternate date specified by the Department in writing, to demonstrate compliance with the emission limit..." By establishing an exclusive link between the test and the limit, the provision impermissibly limits credible evidence.

- Section I.B.(3)(b)(1) states "The permittee shall perform compliance emission testing of carbon monoxide emissions from Stack S03, while burning wood fuel in the thermal oil heater, to demonstrate compliance with the carbon monoxide emission limit..." This illegally limits credible evidence.
- Section I.B.(4)(b)(1) states "The permittee shall conduct a compliance emission test of the formaldehyde emissions from Boiler B03, while burning wood fuel, within 90 days of 1 September 2007, or within 90 days of an alternate date specified by the Department in writing, to demonstrate compliance with the emission limit.." By establishing an exclusive link between the test and the limit, the provision impermissibly limits credible evidence.
- Section I.C.(1)(b)(1) states "The permittee shall perform compliance emission testing of particulate matter emissions from Stack S04, to demonstrate compliance with the particulate matter emission limit..." This illegally limits credible evidence by creating an exclusive link between the test and the limit.
- Section I.C.(2)(b)(1) states "The permittee shall perform compliance emission testing of visible matter emissions from Stack S04, to demonstrate compliance with the visible emission limit..." For the same reasons as above, this provision is illegal.
- Section I.C.(3)(b)(1) states "The permittee shall perform compliance emission testing of carbon monoxide emissions from Stack S04, to demonstrate compliance with the carbon monoxide emission limits..." This violates the credible evidence rule.
- Section I.C.(4)(b)(1) states "The permittee shall perform compliance emission testing of volatile organic compound (VOC) emissions from Stack S04, to demonstrate compliance with the VOC emission limit..." This violates the credible evidence rule.
- Section I.C.(5)(b)(1) states: "The permittee shall perform compliance emission testing of formaldehyde emissions from Stack S04, to demonstrate compliance with the formaldehyde emission limit..." This violates the credible evidence rule.
- Section I.B.(a)(3) states "The permittee shall calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system..." This link between the COMS and the opacity limit may illegally restrict credible evidence and must be changed.

III. THE PERMIT CONTAINS CONDITIONS THAT VIOLATE U.S. EPA POLICY REQUIRING A PERMIT TO BE PRACTICALLY ENFORCEABLE.

The proposed permit contains numerous conditions which are not practically enforceable. These conditions violate U.S. EPA policy regarding practical enforceability and, consequently, must be corrected. For a permit condition to be enforceable, the permit must leave no doubt as to exactly what the facility must do to comply with the condition. U.S. EPA Region 9 Title V Permit Review Guidelines, Sept. 9 1999, p. III-46.

A permit is enforceable as a practical matter (or practically enforceable) if permit conditions establish a clear legal obligation for the source [and] allow compliance to be verified. Providing the source with clear information goes beyond identifying the applicable requirement. It is also important that permit conditions be unambiguous and do not contain language which may intentionally or unintentionally prevent enforcement.

Id.

A permit condition is not practically enforceable if it references documents, procedures, instructions, etc., that are described in a manner that is insufficient to allow such items and the content thereof to be specifically, finally and conclusively identified. U.S. EPA Region 9 Title V Permit Review Guidelines, Sept. 9 1999, p. III-46. Further, "specific numbers must be incorporated into the permit rather than a reference to a document which may not include clear requirements." *Id.* at III-52. Terminology such as "reasonable precautions" or "best engineering practices" must be defined. *Id.* at III-52, III-53.

A. Certain Permit Terms Must Be Defined Or Removed To Make the Permit Practically Enforceable.

The permit is not practically enforceable for the following reasons:

- Section I.A.(1)(b)(5) states "The permittee shall establish quality assurance and control practices to ensure the continuing validity of the wet electrostatic precipitator operating parameter data specified in conditions I.A(1)(b)3) and I.A(1)(c)4). The permittee shall consider manufacturer recommendations or requirements applicable to the monitoring in developing appropriate quality assurance and control practices." DNR must specify what quality assurance and control practices are required. If a specific plan or "manufacturer recommendations" are required, DNR must incorporate such requirements into the permit. This should include attaching a copy of such plan or recommendations to the draft permit for public review and comment.
- Section I.A.(1)(a)(4) requires the facility to:

restore operation of the dryer system to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion (other than those caused by excused startup or shutdown conditions).

The following terms must be defined more specifically to make this permit requirement practically enforceable: "normal or usual manner of operation;" "expeditiously as possible;" "good air pollution control practices;" "minimizing the period of any startup, shutdown, or malfunction;" and "normal operation."

- Section I.A.(1)(c)(10) states "[t]he permittee shall promptly notify the Department and, if necessary, submit a proposed modification to the operation permit to address monitoring changes pursuant to 40 C.F.R. Part 64..." The permit must state when a proposed modification is "necessary." Additionally, the DNR must set forth the conditions under which "compliance or performance testing document a need to modify the existing wet ESP operating parameter ranges" in Section I.A.(1)(c)(10)(b). Additionally, EPA must approve any additional or alternative compliance methods.
- The phrase "primary fuel" must be defined for Section I.B.(2)(a). For example, if wood must be burned as a primary fuel, the permit should set a minimal percentage of wood being fired and require the necessary monitoring and reporting to verify compliance with this requirement.
- Section I.C.(2)(a)(1) purports to excuse opacity violations "as permitted by the Department, for such purposes as an operating test, use of emergency equipment, or other good cause, provided no hazard or unsafe condition arises." This provision must be removed because it allows DNR to make off-permit changes to the Permit's limits and requirements. Moreover, the public cannot determine whether such changes have been met by reference to the Permit and, therefore, the Permit is not practically enforceable. Furthermore, the Permit must define the terms: "emergency equipment;" "other good cause;" and "hazardous or unsafe conditions." To the extent that the Permit provides a blanket exemption for startup, shutdown and malfunction, the Permit violates the requirements of Part 70.
- The Permit should define the terms "[w]hen combustion equipment is being cleaned" and "new fire started" in Section I.D.(2)(1)(a). Specifically, the Permit must set forth the conditions that DNR accepts as excusable opacity exceedances due to each of these conditions. Furthermore, the Permit should establish time limits for establishing a new fire and for cleaning equipment. Because P05 and P06 fire natural gas, the time to start a "new fire" is minimal and the maximum

time for startup should be established. To the extent that the Permit provides a blanket exemption for start-up, shutdown and malfunction, the Permit violates the requirements of Part 70.

- Section I.D.(1)(a)(4) requires the facility to vent paint spray emission inside the building, or to design the painting equipment "in a manner that does not create particulate overspray." The permit must, at a minimum, define what a "a manner that does not create particulate overspray" is, and establish a monitoring method to determine whether there is "particulate overspray." Even with these additions, the Permit is illegal because it establishes a work-practice limit (i.e., a non-overspray practice) outside the permitting process.
- The Permit must define the following terms and phrases in Section I.D.(2)(a)(1): "combustion equipment is being cleaned or a new fire started;" "other good cause;" and "hazard or unsafe condition." The DNR must set forth all conditions under which it may waive the opacity requirements in Section I.D.(2) if this limit is to be practically enforceable. Even with this added explanation, this permit term is illegal because it allows DNR to establish off-permit conditions for compliance that are not subject to public notice and comment. Such case-by-case requirements also cannot be practically enforced by the public. Moreover, according to U.S. EPA policy, blanket exemptions are not allowed in the Title V permit.
- Section I.E.(2)(a)(1) suffers the same deficiencies as I.D.(2)(a)(1). See above.
- The Permit must contain specific requirements to make Section I.F.(1)(a) practically enforceable. The Permit states "[t]he permittee may not cause, allow, or permit any materials to be handled, transported, or stored without taking precautions to prevent particulate matter from becoming airborne." DNR, EPA and the public cannot enforce this requirement unless the Permit states, specifically, what precautions are necessary to prevent particulate matter from becoming airborne.
- Section I.H.(1)(a)(1) must be removed from the permit because it is not practically enforceable. The public, and likely DNR, cannot determine whether an alternative fuel meets the standards set forth without redoing all of the analysis done for prior permits for this source, including air dispersion modeling. This necessitates a new construction permit.
- Section I.B.(2)(c)(3) must be modified to remove the phrase "Unless otherwise specified by the Department." This phrase has the potential to cause confusion in enforcement proceedings as to whether the Department has "otherwise specified." Moreover, this phrase improperly allows the DNR to modify permit requirements outside of the permitting process. The DNR's decision to require or waive the monitoring requirement grants DNR too much discretion. See U.S. EPA Region 9 Title V Permit Review Guidelines, Sept. 9 1999, III-49. This could allow the

facility to negotiate the condition "off permit" and bypass the permitting process requirements and procedures. *Id.*

Similarly, Section I.J.(3)(a)(1)(b) must be modified to remove DNR discretion to modify the testing requirements in the permit. The permit purports to allow DNR to approve alternate monitoring requirements or test methods without a permit modification and public notice and comment. See U.S. EPA Region 9 Title V Permit Review Guidelines, Sept. 9 1999, III-49. This "off permit" revision or modification of requirements unlawfully bypasses the permitting process requirements and procedures. Id.

B. The Permit Must Require All Documents and Records Necessary to Determine Compliance to Be Provided To DNR.

The permit is not practically enforceable by citizens because it does not require the documents necessary to determine compliance to be publicly available at the DNR's offices. As noted above, all terms of a permit must "allow compliance to be verified." US EPA Region 9 Title V Permit Guidelines at p. III-46. Throughout the Permit the permittee is required to maintain records to show compliance with emission limits, but is not required to submit those records to the DNR. Because these compliance documents will not be available to the public, the public lacks access to the data necessary to determine compliance and the permit is not practically enforceable. All quality assurance plans, i.e., for COMS, must be submitted to the DNR and publicly available. The following are problematic requirements because they do no require compliance documents to be submitted to DNR, and therefore, publicly available:

- Section I.A.(1)(c)(5), (8) and (10)
- Section I.A.(2)(c)(2)
- Section I.A.(3)(c)(2) through (6)
- Section I.A.(4)(c)(2) through (5)
- Section I.A.(5)(c)(2) through (5)
- Section I.A.(6)(b) and (c)
- Section I.B.(1)(c)(2) through (8)
- Section I.B.(3)(c)(2) through (5)
- Section I.B.(4)(c)(2) and (3)
- Section I.B.(5)(b) and (c)
- Section I.C.(1)(c)(2)
- Section I.C.(2)(c)(2)
- Section I.C.(3)(c)(2) and (3)
- Section I.C.(4)(c)(2)
- Section I.C.(5)(c)(2) through (4)
- Section I.C.(6)(b) and (c)
- Section I.C.(7)(b) and (c)
- Section I.D.(1)(b)(2) and (3) and I.D.(1)(c)(2) through (4)
- Section I.D.(2)(c)(2)
- Section I.D.(3)(b) and (c)
- Section I.D.(4)(b) and (c)

- Section I.E.(1)(c)(3) and (4)
- Section I.E.(2)(b) and (c)
- Section I.E.(3)(b) and (c)
- Section I.E.(4)(b) and (c)
- Section I.F.(1)(c)
- Section I.H.(1)(b) and (c)

Additionally, if DNR grants the permittee permission to submit summary excess emission reports, pursuant to Permit § I.J.(5)(a)(2), the public will not have the information otherwise required in full excess emission reports. See Permit § I.J.(5)(a)(1). The information required in a full excess emission report is necessary to determine compliance with permit limits, especially in cases where the permit allows exceedances during startup and shutdown. 40 C.F.R. § 70.6(a)(3)(ii) and (iii). Without this information, the Permit's limits are not practically enforceable. Moreover, the decision to require or waive the full excess emission report requirement grants DNR too much discretion. See U.S. EPA Region 9 Title V Permit Review Guidelines, Sept. 9 1999, III-49. Such agency discretion also allows the source to negotiate the reporting requirements "off permit" and bypass the permitting process and procedures. Id. Therefore, this provision must be removed from the Permit and DNR must require full excess emission reports.

IV. THE PERMIT MUST REQUIRE PSD PERMITTING IF THE FACILITY VIOLATES ITS SYNTHETIC MINOR REQUIRMENTS.

The facility has elected to become a PSD synthetic minor by limiting its emissions below the PSD major-source threshold. If the facility does not comply with these limits, it has circumvented PSD permitting and the more stringent emission limits required by PSD. Therefore, each synthetic minor permit limit contained within the Permit should include a requirement that the facility submit a PSD permit application within 60 days of exceeding its synthetic-minor limit.

Moreover the permit must contain production and/or operational limits in addition to emission limitations to maintain a synthetic minor source.

V. DNR MUST REQUIRE 85% VOC CONTROL FROM THE PROCESS LINES BECAUSE THE RECORD LACKS SUFFICIENT BASIS TO FIND 85% CONTROL TECHNOLOGICALLY INFEASIBLE.

The Permit contains two VOC limits based on LACT. See Permit §§ I.C.(4)(a) and I.D.(3)(a)(1). These limits are based on Wis. Admin. Code § NR 424.03(2)(c). That provision of the Wisconsin SIP states:

Where 85% control as required under either par. (a) or (b) has been demonstrated to be technologically infeasible for a specific process line, the owner or operator shall use the latest available control techniques and operating practices demonstrating best current technology, as approved by the department.

In other words, a LACT limit only applies if 85% control of VOCs is "technologically infeasible." Footnotes in the permit state that technological infeasibility was determined in Permit Nos. 91-MWH-094 and 03-MDW-120. This is an insufficient basis for establishing a LACT-based limit, rather than an 85% control limit for two reasons.

First, the proposed operating permit relies on a determination made years ago, (15 years ago for I.C.(4)(a)), rather than determining technological infeasibility today. In fact, the DNR's Analysis and Preliminary Determination for Permit No. 03-MDW-120 states that no technological feasibility analysis was even done for that permit. See Analysis and Preliminary Determination for Construction and Operation Permits for the Proposed Construction and Operating Permits for the Proposed Construction of a New Lap Siding Line for Louisiana-Pacific Corporation Located at 9300 County Highway S, Tomahawk, Lincoln County, Wisconsin at 15. Instead, the DNR relied upon an earlier analysis for a different process line. Id.

DNR may not rely on prior determinations for technological feasibility. Unlike the BACT requirements in the PSD program, which are triggered at the time construction or modification, the SIP requirements in Wis. Admin. Code § NR 424.03(2) apply at all times. Determinations under Chapter NR 424 are not permanently established at the time the source is constructed, or at the time the first permit is issued. DNR must reevaluate prior "technological infeasibility" determinations each time a permit is issued to a source regulated by Wis. Admin. Code § NR 424.03(3).

Second, there is nothing in the administrative records for this Permit, permit 91-MWH-094, or permit 03-MDW-120 showing that 85% control is not technologically feasible. The definition of technological feasibility is provided in EPA guidance related to top-down BACT analysis. In the 1990 Draft New Source Review Workshop Manual, EPA defines technically feasible controls as "available and applicable." New Source Review Workshop Manual at B.17 (NSR Manual). This means that the control option (in this case the technology to achieve 85% VOC control) is technologically feasible if it is available through commercial channels and can be installed and operated at the source. *Id.* Notably, cost is not considered in a technological feasibility determination. Nowhere in the record has DNR made this finding. Therefore, DNR must require 85% VOC control.

For these reasons, DNR must replace the LACT limit with an 85% VOC control limit in the Permit.

VI. WHEN BOTH NSPS AND SIP OPACITY LIMITS APPLY, THE PERMIT MUST REQUIRE COMPLIANCE WITH BOTH LIMITS.

The Permit limits visible emissions from B03 to 20% opacity, based on the requirements in Wis. Admin. Code § NR 440.207(4)(c). See Permit § I.B.(2)(a). The permit should also require compliance with the requirements in Wis. Admin. Code § NR 431.05(1). Specifically, the Permit fails to require the following limit, in addition to those required in Chapter NR 440:

When combustion equipment is being cleaned or a new fire started, emissions may exceed number 1 of the Ringlemann chart or 20% opacity but may not exceed number 4 of the Ringlemann chart or 80% opacity for 6 minutes in any one hour. Combustion equipment may not be cleaned nor a fire started more than 3 times per day.

This is important because, while the NR 440 limits are generally more stringent, the Permit excuses excess emissions during startup, shutdown and malfunction. See Permit § I.B.(2)(a)(2). While the NSPS appears to allow these excess emissions, the Wisconsin SIP limits emissions during startup and equipment cleaning to 80% opacity for 6 minutes and prohibits startup more than 3 times per day. These SIP-based limits must be included in addition to the NSPS limits.

VII. THE PERMIT LANGUAGE SHOULD BE MODIFIED TO RECOGNIZE ALL LIMITS AS FEDERALLY ENFORCEABLE.

The Permit contains the following statement: "An asterisk "*" throughout this document denotes legal authority, limitations, and conditions which are not federally enforceable." See Permit at p. 2. The Draft Permit does not appear to denote any limits as not federally enforceable by using an "*". However, this permit language must be removed. As the DNR is aware, all terms in a Title V permit or a SIP-based permit are federally enforceable. See *Notice of Deficiency for Clean Air Act Operating Permit Program in Wisconsin*, Environmental Protection Agency, 69 Fed. Reg. 10167, 10170-71 (March 4, 2004) ("All terms and conditions of a permit issued pursuant to a program approved into a state's SIP are federally enforceable."). The statement on page 2 should be changed to affirmatively state that all terms of the Permit are federally enforceable, meaning enforceable by US EPA as well as by the public through a citizen suit.

VIII. MISCELLANEOUS

- The permit contains a footnote which states that "Calcium carbonate was approved as a fuel additive by the Department in a letter dated 26 May 1998." Please explain this statement. What type of approval is this? Was it through a construction permit, an administrative modification, or some other process? If no opportunity for public notice and comment was provided for this modification, please identify the statutory provision allowing DNR to make this modification.
- Please state whether this facility is covered by a 1993 consent decree with Louisiana Pacific.
- o Please explain why monthly monitoring and recordkeeping for fuel usage is required in I.E.1.(c)(3), whereas the regulation cited for this requirement, NR 440.207(9)(g), requires daily record keeping.

IX. CONCLUSION

For the foregoing reasons, the Draft Permit fails to meet all necessary requirements. These deficiencies must be corrected before issuing a final permit.

Dated in Madison, Wisconsin this _____ day of May, 2005.

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State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor Scott Hassett, Secretary John Gozdzialski, Regional Director Hayward Service Center 10220 State Highway 27 South Hayward, WI 54843 Telephone 715-634-2688 FAX 715-634-9232

17 June 2005

File Reference: 4560 FID #: 735057950

Mr. David Bender Bender Law Offices 354 West Main Street Madison, WI 53703

Subject: Response to Comments on Permit Nos. 05-MDW-024, 05-MDW-024-OP, and 735057950-P10

Dear Mr. Bender:

The attachment to this letter contains responses to the comments in your letter of 23 May 2005 to the Wisconsin Department of Natural Resources (DNR) regarding the draft permit for the Louisiana-Pacific Corporation plant in Tomahawk, Wisconsin. The draft permit was public noticed as both a construction permit (05-MDW-024) and an operation permit (05-MDW-024-OP and 735057950-P10) because the permittee requested changes to previous emission limits and production limits as a part of the renewal of the Title V operation permit for the facility. The public comment period started on Tuesday, 3 May 2005 when the public notice was published in the Tomahawk Leader and ended on Thursday, 2 June 2005. The construction permit was issued earlier today.

The timing of when a proposed operation permit is submitted to the United States Environmental Protection Agency (USEPA) is based on the circumstances of an individual permit. In cases where the only permit action is the issuance, revision, or renewal of the operation permit for a major source, the proposed permit is submitted to USEPA following the resolution of the comments received on the draft permit. When a construction permit is done in parallel with an operation permit (as is the case with the Title V renewal for Louisiana-Pacific), the proposed permit is submitted to USEPA following resolution of comments on the draft permit and completion of the construction/ modification project(s) authorized by the construction permit. As a result, the proposed permit for the Louisiana-Pacific Corporation Tomahawk plant will be submitted to USEPA at the discretion of the DNR following the completion of the modifications to the facility authorized by Permit No. 05-MDW-024.

The status of individual air permits (including the start of the 45 day USEPA review period) is available on the Wisconsin DNR web site, as previously noted in my e-mail response to you dated 23 May 2005. If you have any further questions regarding the construction and operation permits for the Louisiana-Pacific Corporation Tomahawk plant, you can contact me at 715-634-9658, extension 3526.

Sincerely,

cc:

Michael Wagner, PE Air Management Engineer Northern Region

Michael Wogner

Morthern Region

Northern Region Air Management Program - Hayward Northern Region Air Management Program - Rhinelander Permits & Stationary Source Modeling Section - Madison (AM/7) Louisiana-Pacific Corporation, P.O. Box 190, Tomahawk, WI 54487



Particulate Matter Emissions,

- The Department has determined that the monitoring requirements in the draft permit are adequate to demonstrate compliance with the applicable particulate matter emission limits.
- There are no requirements in chapters NR 439, and NR 440, Wis. Adm. Code for any of the emission units at the Louisiana-Pacific Corporation Tomahawk Mill to have a Continuous Emission Monitoring System (CEMS) for particulate matter emissions.
- There are no requirements in chapters NR 439, and NR 440, Wis. Adm. Code for periodic stack tests of particulate matter emissions from B03. As a matter of practice, the Department requires a stack test of particulate matter emissions from wood fired boilers once during the 5-year life of the Title V operation permit. Permit No. 735057950-P01 required the company to perform a stack test of particulate matter emissions from B03 within one year of permit issuance. The draft Title V operation permit renewal requires a similar test within 90 days of 1 September 2007. It should be emphasized that these tests are required by the Department using the authority in section NR 439.075(1)(b), Wis. Adm. Code. In previous engineering analyses, Department staff determined that B03 would meet the applicable particulate matter emission limits when the allowed fuels are burned. Past testing on B03 verifies this determination.
- The Department has determined that the specified recordkeeping requirements associated with the work practices required by the permit for the panel siding line (P05) and the lap siding line (P06) are adequate to monitor compliance with the particulate matter emission limits for these sources. Chapter NR 439, Wis. Adm. Code does not require periodic stack testing as a means of compliance monitoring or demonstration for emission sources that emit particulate matter in this manner or quantity. However, the Department reserves the authority to require demonstration of compliance using the methods specified under condition I.D(1)(c)1) of the permit.
- Condition I.D(1)(a)4) is written the way it is to allow the company some flexibility to make changes to the paint application equipment without needing to get a construction permit in the event that newer, less polluting technologies become available.

Volatile Organic Compound Emissions,

- The Department has determined that the monitoring requirements in the draft permit are adequate to demonstrate compliance with the applicable volatile organic compound (VOC) emission limits. The control of volatile organic compounds by 85 percent is not required and the company will utilize LACT as outlined by condition I.D(3)(a)1) of the permit. As a result, emission testing to demonstrate 85 percent control of VOC emissions is not warranted.

II) Requirements related to Credible Evidence,

- As stated in the preamble to the permit, "Not withstanding the compliance determination methods which the owner or operator of a source is authorized to use under ch. NR 439, Wis. Adm. Code, the department may use any relevant information or appropriate method to determine a source's compliance with applicable emission limitations." Consequently, the Department is not limited from using any credible evidence in determining the compliance status of the facility. It should be noted that the above phrase was included in the preamble to Permit No. 735057950-P01. No objections were raised by the public or USEPA with regard to the adequacy of the monitoring requirements in Permit No. 735057950-P01 when it was issued.

III) Practically Enforceable Permit Conditions,

- The Department disagrees with your statements regarding the practical enforceability of conditions in the draft operation permit renewal for the Louisiana-Pacific Corporation Tomahawk Mill, including the claims that the permit allows unlawful "off permit" changes to the conditions contained in the permit. The Department has determined that the existing monitoring requirements are adequate to demonstrate compliance with the limitations and requirements in the permit and are practically enforceable.
- The startup and shutdown procedures referenced in condition I.A(1)(a)4), and the quality assurance and control practices referenced in condition I.A(1)(b)5) are required by condition I.A(1)(c)6) to be described in the Malfunction Prevention and Abatement Plan required by condition I.J(6)(a)1) of the permit. This plan is required to be submitted to the Department upon request pursuant to condition I.J(6)(a)3) of the permit. Should the public develop a need to review this plan, the plan can be made available for review at the Department's Rhinelander service center.
- Condition I.A(1)(c)10) which is renumbered to I.A(1)(c)11) in the final construction permit already states when a proposed modification of the operation permit is necessary pursuant to the Compliance Assurance Monitoring (CAM) Rule in conditions I.A(1)(c)11)a) and b). If a modification is required to be made to the operation permit, the appropriate revision procedure is required to be followed as described in sections NR 407.11, NR 407.12, and NR 407.13, Wis. Adm. Code. Minor and significant revisions under these administrative codes provide for notification and submittal to USEPA. Stating these revision procedures in the Title V permit is unnecessary.
- Defining the phrase "primary fuel" in the permit is unnecessary. Nonetheless, conditions I.B(1)(a)3) and 4) place restrictions on the amount of alternate fuels that may be burned in Boiler B03. The Department has analyzed the emission impacts from the fuels burned by B03 and has determined that the applicable requirements and standards will be met when these fuels are burned at the rates specified in the permit.
- It is not necessary to define the terms you question in conditions I.C(2)(a)1), I.D(2)(a)1), and I.E(2)(a)1) regarding the exceptions to the visible emission limits in section NR 431.05, Wis. Adm. Code. These terms include "emergency equipment", "other good cause", "hazardous or unsafe conditions", and others noted in your comment letter. These exceptions are taken directly from the administrative code and do not require further definition in the permit.
- The Department disagrees with your allegation that condition I.D(1)(a)4) establishes a work practice limit outside the permit process. This condition describes the types of paint application equipment that the permittee is allowed to use on P05 and P06 to ensure that there are no particulate matter emissions to the ambient air from these emission sources.
- Condition I.F(1)(b)1) requires the permittee to include good operating practices for P41 in the Fugitive Dust Control Plan required by condition I.J(5)(a)1). Condition I.F(1)(c)1) requires the permittee to keep records of any actions taken pursuant to the Fugitive Dust Control Plan to minimize the fugitive dust emissions from P41. These conditions are adequate to demonstrate compliance with the requirements in condition I.F(1)(a)1) for minimizing the fugitive dust emissions from P41.
- Condition I.H(1)(a)1) restates the exclusions from modification listed in section NR 406.04(4)(a), Wis. Adm. Code. If the permittee meets these requirements, the permittee may use a new fuel or raw material without needing to get a construction permit. The addition of a new fuel does not automatically trigger the need for a new construction permit or a new air dispersion modeling analysis. As an alternative, the Department could

leave condition I.H(1)(a)1) out of the permit and the permittee could still make modifications under section NR 406.04(4)(a), Wis. Adm. Code. Conditions I.H(1)(b)1) and I.H(1)(c)1) through 3) are adequate to make condition I.H(1)(a)1) practically enforceable.

- Section NR 439.09(10)(b), Wis. Adm. Code opens with the phrase, "Unless otherwise specified by the Department" in describing what constitutes excess emissions for various pollutants. Condition I.B(2)(c)3) has been renumbered as condition I.B(2)(c)4) in the construction permit and accurately represents this rule.
- Section NR 439.07(1), Wis. Adm. Code includes the phrase, "or according to other test methods approved in writing by the department." Condition I.J(3)(a)1)b) is an accurate paraphrase of portions of section NR 439.07(1), Wis. Adm. Code. The paraphrase is necessary for clarification purposes.
- Section NR 439.03(1)(b), Wis. Adm. Code states, "In lieu of submission of all monitoring results, a summary of the monitoring results may be submitted to the department. The summary shall include sufficient data for the department to determine whether the source is in compliance with the applicable requirements to which the monitoring relates." This rule clearly gives the Department the discretion to work with the permittee on the format of the semi-annual monitoring reports to ensure that adequate information is provided to allow the Department to determine the compliance status of the facility while minimizing the amount of paper that needs to be submitted by the permittee and subsequently reviewed and stored by the Department. Agency staff have the authority to request additional information in the event that it is necessary to determine the compliance status of the facility.
- Section NR 439.10, Wis. Adm. Code states, "The owner or operator shall submit either a full excess emission report under par (a) or a summary excess emission report under par (d), as specified in writing by the department." This rule clearly gives the Department the discretion to specify which format the permittee should use for the quarterly excess emission reports required by the permit.

IV) Synthetic Minor Requirements and PSD Permits,

- The limitations and requirements in the permit for the Louisiana-Pacific Corporation Tomahawk Mill are adequate to limit the potential to emit from the facility to levels below the PSD applicability thresholds. Your request to add language to each synthetic minor condition requiring the permittee to submit a PSD permit application within 60 days of exceeding a synthetic minor limit has not been done. There is no regulatory requirement for such a condition and the Department considers such language unnecessary. Any violations of permit conditions are handled with appropriate enforcement action.

V) Control of VOC Emissions by 85 Percent or LACT,

- The Department is not required to follow the procedures in the EPA guidance for top down PSD BACT analyses when determining technological feasibility under section NR 424.03(2)(c), Wis. Adm. Code. The cost of add on control equipment plus other factors are used by the Department to determine whether 85 percent control is feasible for a given process line. The permittee did not request any changes to the VOC limitations and requirements for the press system (P04) in Permit No. 05-MDW-024 so there was no reason to reopen the LACT determination for this emission unit. LACT is determined at the time of approval and is not subject to periodic reevaluation so your interpretation regarding reevaluation of technological infeasibility under section NR 424.03(2)(c), Wis. Adm. Code is incorrect.

Permit No. 03-MDW-120 specified that the permittee could use a specific paint application system (high volume, low pressure spray guns for P05 and a fan coating system for P06) or an alternate high transfer efficiency application system approved in writing by the Department. The option to change the paint application system allows the permittee to use newer, less polluting technology should such equipment become available during the life of the permit without needing to get a new construction permit. The permittee installed a fan coating system on the lap siding line (P06), but later received written approval from the Department to change to high volume, low pressure (HVLP) paint application equipment as allowed by Permit No. 03-MDW-120. The current permit reflects this change.

You are correct that a formal technological feasibility analysis was not done for Permit No. 03-MDW-120. As the author of Permit No. 03-MDW-120, I used my engineering judgment regarding the issue and included the following statements in the preliminary determination for Permit No. 03-MDW-120.

"At the discretion of the permit engineer, a new 85 percent control feasibility study will not be done for this project and 85 percent control of the VOC emissions from the two siding lines will be considered technologically infeasible. For most coating applications, oxidation systems are considered the most practical method of control. Based on the formulation of the current primer used by the company (less than 0.0002 pound of VOC per gallon and no significant organic HAP emissions), an oxidation system would likely produce a net increase in air pollution from burning natural gas. As a result, it is not reasonable to require the installation of such a system to control VOC emissions from the two coating lines at the facility, 85 percent control of the VOC emissions from the siding lines is technologically infeasible, and LACT applies."

VI) NSPS and SIP Opacity Limits,

- The relationship between the New Source Performance Standard (NSPS) opacity limits in NR 440 and the State Implementation Plan (SIP) opacity limits in NR 431 was questioned by the facility the week before the Department received your comment letter. This issue was being researched at the time your comment letter was received. The conclusion reached by the permit author is that both limits are applicable. The exceptions in NR 431.05, Wis. Adm. Code have been added to the permit with the disclaimer that the exceptions apply unless they are less restrictive than the NSPS requirements. Section NR 440.10(2), Wis. Adm. Code, states that the more restrictive limit applies when multiple limits apply.

VII) Permit Language should be Modified to Recognize all Limits as Federally Enforceable,

- Conditions and limitations that originate in construction permits under the Department's approved SIP are federally enforceable. Conditions that are not from construction permits and not part of the SIP can be flagged as state-only in an operation permit. Operation permits specify which limitations are coming from a construction permit by referencing the originating construction permit.

VIII) Miscellaneous,

- Chapter NR 406, Wis. Adm. Code allows certain changes at a facility to qualify as exempt modifications or exclusions from modification. The 26 May 1998 letter from the Department to Louisiana-Pacific allowing the use of calcium carbonate as a fuel additive in the dryer burners was an exclusion from modification. Copies of the correspondence with the company on this issue are included for your reference. The Department regularly receives requests from industry asking for determinations on whether individual projects require a construction permit. In this case, the Department determined that the proposed use of calcium carbonate as

- a fuel additive did not trigger the need for a construction permit. No public notification or public review period is required for projects that are exempt from permit requirements. The original Title V permit issued to the facility in August 2000 allowed the facility to use calcium carbonate as a fuel additive. No objections were raised by the public or USEPA with regard to the content of Permit No. 735057950-P01.
- The Tomahawk Mill was listed in the 1993 consent decree with Louisiana-Pacific. However, it should be noted that the Tomahawk Mill was not one of the facilities identified as having violated Prevention of Significant Deterioration (PSD) and New Source Review (NSR) requirements. The issue with the Tomahawk Mill was verification that the emissions from the facility were in compliance with the construction permit issued during 1992. The construction permit (91-MWH-094) established limitations to make the facility a synthetic minor source under the PSD program prior to construction of the plant.
- Section NR 440.207(9)(g), Wis. Adm. Code applies to both B03 and B09. The footnote on page 33 of the draft permit notes that USEPA issued a policy memo dated 20 February 1992 that allows monthly records in lieu of daily records for affected units that burn only natural gas. A copy of the memo is attached for your reference. The recordkeeping requirement for B03 (condition I.B(1)(c)5) on page 16 of the draft permit) lists only the NR 440.207(9)(g), Wis. Adm. Code citation, whereas the recordkeeping requirement for B09 adds NR 439.04(1)(d), Wis. Adm. Code and the footnote to explain why monthly records are allowed.

98/024

April 2 14 1998



P.O. Box 190 Tomanawk, Wisconsin 54487 715/453-8867 715/453-1814 FAX

State of Wisconsin
Department of Natural Resources
ATTN: Robin Capen
Bureau of Air Management
P.O. Box 818

Rhinelander, WI 54501

Dear Mr. Capen:

This letter is written to request your review and approval of a proposed revision to the fuel system for dryer burners at Louisiana-Pacific's Tomahawk mill. The proposed revision involves the addition of calcium carbonate to our dryer fuel to allow the incineration of our sawline trim in the dryer burners.

Our facility has the ability to produce commodity oriented strand board products or exterior siding products. While producing OSB, our system is configured to use trim from the sawline as fuel in the dryers. During the production of siding, zinc borate is added to the product and functions as a fungicide. Use of the sawline trim with zinc borate for fuel has proven to rapidly deteriorate the refractory brick in the dryer burners.

Our research into this issue has shown calcium carbonate to be a possible wood fuel additive that may eliminate the harsh effects of the zinc borate on the dryer burners. Trim from the sawline would constitute approximately 25% - 35% by weight of the total wood fuel burned in the dryers. Based on a trial conducted at Louisiana-Pacific's facility in Newberry, MI, the rate of calcium carbonate addition is estimated to be between 1% and 3% by weight of the total wood fuel added to the dryer.

If you have questions or require additional information please contact me. Thank you.

Sincerely,

Brett E. Beaumier
Environmental Manager

Noted:

cc. Mike Anderson File

> Christopher Forslund Plant Manager



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor George E. Meyer, Secretary William H. Smith, Regional Director Northern Region Headquarters PO Box 818, 107 Sutliff Ave. Rhinelander, WI 54501-0818 TELEPHONE 715-365-8900 FAX 715-365-8932 TDD 715-365-8957



FID: 735057950 Permit Number: 91-MWH-094R

Mr. Brett E. Beaumier Louisiana-Pacific Corporation P.O. Box 190 Tomahawk, Wisconsin 54487

SUBJECT: Use of a Fuel Additive for Dryers P01 and P02

Dear Mr. Beaumier:

The Northern Region Air Management Program, Department of Natural Resources, received your letter dated April 21, 1998, requesting review and approval of a proposed revision to the fuel systems for the dryer burners, P01 and P02. The proposed revision involves the addition of calcium carbonate to the dryer fuel to allow the incineration of your saw-line trim in the dryer burners.

The Department finds that:

- 1. Your source has continuously had such design capability;
- 2. The use will not cause or exacerbate the violation of an ambient air quality standard or an ambient air increment:
- 3. The use is not prohibited by any permit, plan approval or special order applicable to the source;
- 4. The use will not will not result in a net emissions increase of a hazardous air contaminant;
- 5. The use will not result in a violation of any emission limit in chs. NR 405, 408, 409, and 415 to 436.
- 6. The use will not subject the source to any standard or regulation under section 12 of the act (42 U.S.C. 7412).

The Department has determined that the use of calcium carbonate is excluded from modification, per NR 406.04(4)(a), Wis. Adm. Code.

Please be aware that all of the conditions of your existing permit, #91-MWH-094R, are still in effect.



If you have any questions, please call me at (715)365-8933.

Sincerely,

Robin K. Capen

Air Management Engineer Rhinelander Service Center

cc: NSR - AM/7, Madison

Air Management Files, Rhinelander



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460



OFFICE OF AIR AND PADIATION

MEMORANDUM

SUBJECT:

Request for Determination Regarding the Daily Fuel Usage Monitoring Requirements in 40 CFR Part 60, Subpart Dc - Standards of Ferformance for Small Industrial-Commercial-Institutional Steam Generating Units

FROM:

John B. Rasnic, Director John John Stationary Source Compliance Division (EN-341W) Office of Air Quality Planning and Standards

TO:

Jewell A. Harper, Chief Air Enforcement Branch

Air, Pesticides and Toxics Management Division

Region IV

This is in response to your memorandum of December 9, 1991 requesting a determination regarding whether the requirement to record and maintain records of the amount of fuel combusted each day [40 CFR \$60.48c(g)] can be modified or waived for steam generating units that burn only natural gas or only low sulfur (less than 0.5 weight percent) distillate oil.

SSCD assumes that the plant in question is an affected facility as defined at 40 CFR \$60.40c(a). It is correct that Subpart Dc has no established emission limits for facilities which burn only natural gas. Therefore, we agree with your determination that daily monitoring of the quantity of natural gas consumed at this facility serves little purpose, except where natural gas is fired in combination with other subject fuels, for purposes of prorating the standard. Similarly, daily monitoring of the quantity of distillate oil (with less than 0.5% sulfur) burned also serves little purpose where distillate oil is the sole fuel fired, if fuel supplier certifications are used to demonstrate compliance.

SSCD therefore agrees that on an individual basis, the requirement of 40 CFR \$60.48c(q) to record and maintain the amount of fuel combusted each day can be altered pursuant to authority in 40 CFR \$60.13(i), where: (a) the only fuel used is natural gas, or (b) the only fuel used is distillate oil with a sulfur content less than 0.5% percent and compliance is demonstrated using supplier certifications. Instead, the amount of natural gas or low sulfur distillate oil which a plant combusts could be reported on a less frequent basis, for example a monthly basis. This monthly report could be in the form of fuel bills or meter

readings, for example. Requiring some level of fuel monitoring as opposed to a complete waiver, is necessary to provide the delegated enforcement agency with evidence of the type and quantity of fuel a plant is combusting. Additionally, the enforcing agency should require that such sources certify that they will burn only natural gas or distillate oil using fuel certification, and that they will promptly notify the agency of any anticipated and actual switches in fuel use.

For those units using low sulfur distillate fuel oil, this alternative monitoring option is not an exemption from compliance with any of the fuel certification requirements, including those of 40 CFR \$60.42c(h), 60.44c(g), or any of the reporting requirements, including those of \$60.48c(e)(11) and 60.48c(f).

Since the authority to approve alternative monitoring has not been delegated to the Regions, SSCD should be sent copies of any alternative monitoring provisions approved in accordance with this memo. If there are any questions regarding the issues presented in this memo, please feel free to contact Scott Nelson of my staff at FTS 678-8707.

cc: David McNeal, Region IV
Air Branch Chiefs, Regions I - X
Rick Copland, ESD
Kathryn Smith, AED

BEFORE THE ADMINISTRATOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of the Proposed Revised Operating Permit for the LOUISIANA PACIFIC CORPORATION facility in Tomahawk, Wisconsin

I.D. No. 735057950

Revised Permit No. 735057950-P10

Proposed by the Wisconsin Department of Natural Resources

CERTIFICATE OF SERVICE

STATE OF WISCONSIN) ss COUNTY OF DANE)

I make this statement under oath and based on personal knowledge. On this day I caused to be served upon the following persons a copy of Sierra Club's Petition to the United States Environmental Protection Agency In the Matter of the Proposed Revised Operating Permit for the LOUISIANA PACIFIC CORPORATION facility in Tomahawk, Wisconsin via Certified Mail, Return Receipt Requested:

Stephen L. Johnson US EPA Administrator Ariel Rios Building 1200 Pennsylvania Avenue, N.W. Washington, DC 20460

P. Scott Hassett Wisconsin Dept. of Natural Resources Secretary 101 S Webster St PO Box 7921 Madison, WI 53707-7921 Jon Smith Louisiana-Pacific Corporation 9300 County Highway S Tomahawk, WI 54487

Dated:_	519106		
		Λ 	
		In The	
		Philip Trampe	

Signed and sworn to before me
This ______ day of ______ day

Notary Public, State of Wisconsin My commission: does not expre

Summary of Comments and DNR Responses

I) Permit Fails to Include Adequate Monitoring Requirements,

- According to section NR 407.09(1)(c)1., Wis. Adm. Code, each operation permit is required to include all applicable monitoring requirements. This section goes on to say, "where the applicable requirement does not require periodic testing or instrumental or non-instrumental monitoring, periodic monitoring or testing sufficient to yield reliable data from the relevant time period that are representative of the stationary source's compliance with the permit. Monitoring or testing requirements shall assure use of terms, test methods, units, averaging periods and other statistical conventions consistent with the applicable requirement. Monitoring may consist of recordkeeping sufficient to meet the requirements of this subd. 1.b." Section NR 407.09(1)(c), Wis. Adm. Code meets the requirements of 40 C.F.R. 70.6(a)(3)(i) as USEPA has approved this section with Wisconsin's Title V program approval. The Department has determined that the monitoring requirements in the draft permit are satisfactory and meet the regulatory requirements of section NR 407.09(1)(c), Wis. Adm. Code. The original Title V permit issued to the facility contained many of the monitoring requirements in the renewal of the Title V permit for the facility. No objections were raised by the public or USEPA with regard to the adequacy of the monitoring requirements in Permit No. 735057950-P01 when it was issued.

Visible Emissions,

- The Department has determined that the monitoring requirements in the draft permit are adequate to demonstrate compliance with the applicable visible emission limits.
- The burners associated with the dryer system (P01 and P02) are exempt from the requirement to have a Continuous Opacity Monitoring System (COMS) because these units do not meet the definition of "steam generating unit" in section NR 440.207(2)(w), Wis. Adm. Code.
- The Department has determined that biennial stack testing of visible emissions from the dryer system stack (S02) plus the operation of two wet electrostatic precipitator control devices are adequate to meet the visible emission limit on the dryer system (P01 and P02). It should be noted that P01 and P02 utilize the same compliance monitoring and demonstration requirements for visible emissions as those used for particulate matter emissions. USEPA White Paper 2 allows for streamlining of work practice requirements for the same emission unit(s) that address multiple emission requirements.
- The Department has determined that the specified recordkeeping requirements for the panel siding line (P05) and the lap siding line (P06) are adequate to meet the visible emission limits for these sources. It should be noted that P05 and P06 utilize the same compliance monitoring and demonstration requirements for visible emissions as those used for particulate matter emissions. USEPA White Paper 2 allows for streamlining of work practice requirements for the same emission unit(s) that address multiple emission requirements. In addition, it is inefficient to monitor compliance using stack testing methods when work practices or parametric monitoring can be used.
- The Department has determined that the specified recordkeeping requirements for B09 are adequate to meet the visible emission limit for this source. It should be noted that B09 utilizes the same compliance monitoring and demonstration requirements for visible emissions as those used for particulate matter emissions. USEPA White Paper 2 allows for streamlining of work practice requirements for the same emission unit(s) that address multiple emission requirements. In addition, it is inefficient to monitor compliance using stack testing methods when work practices or parametric monitoring can be used.