

**AIR EMISSION PERMIT NO. 13700030-003**  
**Major Amendment**

**IS ISSUED TO**

Hill Wood Products Inc

**HILL WOOD PRODUCTS**  
9483 Ashawa Road  
Cook, St. Louis County, MN 55723

The emission units, control equipment and emission stacks at the stationary source authorized in this permit amendment are as described in the Permit Applications Table.

This permit amendment supersedes Air Emission Permit No. 13700030-001 and authorizes the Permittee to operate and modify the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Unless otherwise indicated, all the Minnesota rules cited as the origin of the permit terms are incorporated into the State Implementation Plan under 40 CFR § 52.1220 and as such are enforceable by U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

**Permit Type:** Federal; Pt 70/Major for NSR

**Operating Permit Issue Date:** February 28, 2006

**Major Amendment Issue Date:** July 14, 2010

**Expiration Date:** February 28, 2011 – Title I Conditions do not expire.

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Don Smith P.E., Manager  
Air Quality Permits Section  
Industrial Division

for Paul Eger  
Commissioner  
Minnesota Pollution Control Agency

### Permit Applications Table

Permit Type	Application Date	Permit Action
Total Facility Operating Permit	4/17/95	001
Administrative Amendment ( <i>not issued</i> )	NA	002
Major Amendment	11/12/08 updated 3/10/10	003

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## **NOTICE TO THE PERMITTEE:**

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	651-296-6300
Outside Metro Area	1-800-657-3864
TTY	651-282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

## **PERMIT SHIELD:**

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

## **FACILITY DESCRIPTION:**

Hill Wood Products is a sawmill and lumber processing facility. The facility purchases birch logs rough cut wood to produce various wood products including wood pallets, wood biscuits, and flooring. The facility sources include:

- Two boilers and dryer combustion sources. The boilers and dryer burn wood waste. The dryer dries wood waste for use as fuel. The dryer has an EFB and cyclone for emissions control. The boilers provide steam for a lumber kiln.
- Particulate emission sources such as debarking, skragging, sawing, trimming, molding, sanding, hammermills, and storage silos. Some units are vented internally without controls, some internally with controls and some externally with controls.
- Miscellaneous sources such as an emergency fire pump, and an emergency generator.

**Administrative Amendment (-002):** *(not issued)*

**Major Amendment (-003):**

This major amendment will add seventeen new emission units, two fugitive sources and one new baghouse and remove twenty-one emission units, one baghouse and a stack vent. The 24" Sander No. 1 and No. 2 will be rerouted from the removed to the existing baghouse. An existing saw will also be routed to the existing baghouse. A like-kind replacement was made on EU044. Hill Wood also requests permit language and regulatory citation corrections to the permit. This amendment will also implement requirements set forth from an October 2008 Stipulation Agreement between the Permittee and the MPCA. This includes performance testing for EU012 and 014 within 60 days of startup of each unit. This amendment will authorize operation of the flooring plant. One-time testing will be updated to periodic testing on a 60 month frequency for EU001, EU002, CE011, CE012, and CE015. Also modeling was submitted to show compliance with Particulate Matter less than 10 microns in size (PM<sub>10</sub>) National Ambient Air Quality Standard, the insignificant activities list was updated and completed requirements were removed.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

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Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.**

**Subject Item: Total Facility**

<b>What to do</b>	<b>Why to do it</b>
<b>SOURCE-SPECIFIC REQUIREMENTS</b>	hdr
Permit Appendices: This permit contains 2 appendices as listed in the permit Table of Contents. The Permittee shall comply with all requirements contained in the appendices.	Minn. R. 7007.0800, subp. 2
Ambient Air Quality Standards: The Permittee shall comply and demonstrate compliance with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50 and with Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080.  The Permittee may demonstrate compliance through modeling, monitoring or an alternative widely-accepted method approved in writing from the MPCA.	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a and 9; Minn. R. 7007.0080, subp. 5; Minn. R. 7007.0100, subps. 7A, 7L and 7M; Minn. R. 7007.0800, subps. 1, 2 and 4; Minn. R. 7009.0010 - 7009.0080
This permit shall not alter or affect the liability of an owner or operator for any violation of applicable requirements prior to or at the time of permit issuance.	Minn. R. 7007.1800(C)(2)
Comply with Fugitive Emission Control Plan: The Permittee shall follow the actions and record keeping specified in the control plan. The plan may be amended by the Permittee with the Commissioner's approval. If the Commissioner determines the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive control plan, then the Permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors as requested by the Commissioner.	Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0100; Minn. R. 7007.0800, subp. 2; Minn. R. 7011.0150; Minn. R. 7009.0020
The Permittee shall comply with the requirements of 40 CFR part 63.  The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard). See 40 CFR pt. 63.9(b)(2).	40 CFR Part 63 - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES; Minn. R. 7007.0800, subp. 2
The parameters used in PM10 modeling for permit number 13700030-003 are listed in Appendix C of this permit.	Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subp. 7(A), 7(L), & 7(M); Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080
Modeling Triggers: For changes that do not require a permit amendment or that require a minor permit amendment, and that affect any modeled parameter or emission rate documented in Appendix C, a Remodeling Submittal requirement is not triggered. The Permittee shall keep updated records on site of all parameters and emission rates. The Permittee shall submit any changes to parameters and emission rates with the next required remodeling submittal.  For changes that require a moderate or major permit amendment and affect any modeled parameter or emission rate, a Remodeling Submittal requirement is triggered. The Permittee shall include previously made changes to parameters and emission rates that did not trigger a remodeling submittal with this modeling submittal.	Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subp. 7(A), 7(L), & 7(M); Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080
Remodeling Submittal: The Permittee must submit to the Commissioner for approval changes meeting the above criteria and must wait for a written approval (in the form of an issued permit amendment) before making such changes. The information submitted must include, for stack and vent sources, source emission rate, location, height, diameters, exit velocity, exit temperature, discharge direction, use of rain caps or rain hats, and, if applicable, locations and dimensions of nearby buildings. For non-stack/vent sources, this includes the source emission rate, location, size and shape, release height, and, if applicable, any emission rate scalars, and the initial lateral dimensions and initial vertical dimensions and adjacent building heights.	Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subp. 7(A), 7(L), & 7(M); Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080
Remodeling Submittal, continued: The plume dispersion characteristics due to the revisions of the information must be equivalent to or better than the dispersion characteristics in the modeling analysis approved February 9, 2010. The Permittee shall demonstrate this equivalency in the proposal. If the information does not demonstrate equivalent or better dispersion characteristics, or if a conclusion cannot readily be made about the dispersion, the Permittee must submit full remodeling.	Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subp. 7(A), 7(L), & 7(M); Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080, continued

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-2** 07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

OPERATIONAL REQUIREMENTS	hdr
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
PERFORMANCE TESTING	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Performance Test Notifications and Submittals:  Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements.  Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test  The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.	Minn. Rs. 7017.2030, subp. 1-4, 7017.2018 and Minn. R. 7017.2035, subp. 1-2
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit.	Minn. R. 7017.2025
MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
RECORDKEEPING	hdr

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-3** 07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007. 1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007.0800, subp. 5(B)
If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. For expiring permits, these records shall be kept for a period of five years from the date the change was made or until permit reissuance, whichever is longer. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format.	Minn. R. 7007.1200, subp. 4
REPORTING/SUBMITTALS	hdr
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.  At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.  At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500



**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-4** 07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

For changes that do not require a permit amendment: - The Permittee shall submit a Part 1 MACT application within 30 days of startup of any 112(j) affected source. The application shall meet the requirements of 40 CFR Section 63.53(a). - The Permittee shall submit a Part 2 MACT application within 90 days of startup of any 112(j) affected source. The application shall meet the requirements of 40 CFR Section 63.53(b). 112(j) affected source is defined in 40 CFR Section 63.51. As of permit issuance, 112(j) affected sources include industrial, commercial, and institutional boilers and process heaters; brick and structural clay products manufacturing; clay ceramics manufacturing.	40 CFR Section 63.52(b)(1) and 63.52(e)(1)
Application for Permit Reissuance: due 180 days before expiration of existing permit.	Minn. R. 7007.0400, subp. 2
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 - 7019.3100
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
DETERMINING IF A PROJECT/MODIFICATION IS SUBJECT TO NSR	hdr
These requirements apply if a reasonable possibility (RP) as defined in 40 CFR Section 52.21(r)(6)(vi) exists that a proposed project, analyzed using the actual-to-projected-actual (ATPA) test (either by itself or as part of the hybrid test at Section 52.21(a)(2)(iv)(f)) and found to not be part of a major modification, may result in a significant emissions increase (SEI). If the ATPA test is not used for the project, or if there is no RP that the proposed project could result in a SEI, these requirements do not apply to that project. The Permittee is only subject to the Preconstruction Documentation requirement for a project where a RP occurs only within the meaning of Section 52.2(r)(6)(vi)(a).  Even though a particular modification is not subject to New Source Review (NSR), or where there isn't a RP that a proposed project could result in a SEI, a permit amendment, recordkeeping, or notification may still be required by Minn. R. 7007.1150 - 7007.1500.	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
Preconstruction Documentation -- Before beginning actual construction on a project, the Permittee shall document the following:  1. Project description 2. Identification of any emission unit (EU) whose emissions of an NSR pollutant could be affected 3. Pre-change potential emissions of any affected existing EU, and the projected post-change potential emissions of any affected existing or new EU. 4. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded due to increases not associated with the modification and that the EU could have accommodated during the baseline period, an explanation of why the amounts were excluded, and any creditable contemporaneous increases and decreases that were considered in the determination.  The Permittee shall maintain records of this documentation.	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.1200, subp. 4; Minn. R. 7007.0800, subps. 4 & 5
The Permittee shall monitor the actual emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using the ATPA test, and the potential emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using potential emissions in the hybrid test. The Permittee shall calculate and maintain a record of the sum of the actual and potential (if the hybrid test was used in the analysis) emissions of the regulated pollutant, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit of any unit associated with the project.	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 & 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-5**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

The Permittee must submit a report to the Agency if the annual summed (actual, plus potential if used in hybrid test) emissions differ from the preconstruction projection and exceed the baseline actual emissions by a significant amount as listed at 40 CFR Section 52.21(b)(23). Such report shall be submitted to the Agency within 60 days after the end of the year in which the exceedances occur. The report shall contain:

- a. The name and ID number of the facility, and the name and telephone number of the facility contact person
- b. The annual emissions (actual, plus potential if any part of the project was analyzed using the hybrid test) for each pollutant for which the preconstruction projection and significant emissions increase are exceeded.
- c. Any other information, such as an explanation as to why the summed emissions differ from the preconstruction projection.

Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 & 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-6** 07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** GP 001 Boilers 1 and 2**Associated Items:** EU 001 Boiler 1

EU 002 Boiler 2

SV 001 Boilers Stack

What to do	Why to do it
The requirements of this group apply separately to each item listed under this group.	hdr
EMISSION AND OPERATIONAL LIMITS	hdr
Total Particulate Matter: less than or equal to 0.6 lbs/million Btu heat input <0.347 lbs/million BTU heat input for PTE calculations>	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0510, subp. 2
Capacity: less than or equal to 4.2 million Btu/hour for each boiler based on the most recent performance test. The maximum rated capacity of each boiler is 6.7 million Btu/hour. This higher capacity is used to calculate potential-to-emit for each boiler.	Minn. R. 7007.0800, subp. 2
Fuel Type: Wood waste as defined in Minn. R. 7011.1201, subp. 48.	Minn. R. 7005.0100, subp. 35a
Daily Recordkeeping. On each day of operation, the Permittee shall calculate, record, and maintain the total fuel use and the type of fuel. This shall be based on throughput logs, meters, and/or delivery records.	Minn. R. 7007.0800, subps. 4 and 5
SPECIFIC PERFORMANCE TESTING	hdr
Performance Test: due before end of each 60 months starting 05/15/2008 to demonstrate compliance with permit requirements and PM and Opacity limits and, if necessary, establish new operational limits.	Minn. R. 7017.2020, subp. 1

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-7** 07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** GP 002 Log Sawing

**Associated Items:** EU 024 Skragg Saw (internally venting, uncollected, uncontrolled)  
EU 025 Double Arbor Saw (internally venting, uncollected, uncontrolled)  
EU 026 Horizontal Band Saw (internally venting, uncollected, uncontrolled)  
EU 027 Green Chain Trimmer Saw (internally venting, uncollected, uncontrolled)  
EU 028 Pallet Lumber Trimmer Saw (internally venting, uncollected, uncontrolled)  
SV 017 Building Ventilation for Internally Venting Units

What to do	Why to do it
The requirements of this group apply separately to each item listed under this group.	hdr
EMISSION AND OPERATIONAL LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity.	Minn. R. 7011.0715, subp. 1(B)

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-8**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item: GP 003 Wood Working Equipment Vented to CE 012**

**Associated Items:** CE 012 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
 EU 029 Vertical Resaw (internally venting, uncollected, uncontrolled)  
 EU 034 Trimmer Saw  
 EU 035 Ripper Saw  
 EU 036 22AL Moulder  
 EU 038 24" Sander 1  
 EU 039 24" Sander 2  
 EU 040 Ripper Saw  
 EU 041 Splitter Saw  
 EU 043 Planner  
 EU 044 Planner  
 EU 051 24" Band Saw  
 EU 052 Trim Saw 1  
 EU 055 Trimmer 2  
 EU 063 Frame Saw #1  
 EU 064 Frame Saw #2  
 EU 065 Frame Saw #3  
 EU 066 Frame Saw #4  
 EU 067 52" Sander #1  
 EU 068 52" Sander #2  
 EU 069 Rip Saw  
 EU 070 24" Double Planer  
 EU 071 Optimizing Saw  
 EU 077 Rip Saw  
 EU 079 Ripper Saw  
 SV 014 Carter Day Baghouse

What to do	Why to do it
The requirements of this group apply separately to each item listed under this group.	hdr
EMISSION LIMITS AND OPERATIONAL REQUIREMENTS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity.	Minn. R. 7011.0715, subp. 1(B)
POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The fabric filter (CE 012) shall be operated at all times when emission units 038 and 039 are in operation. See CE 012 for fabric filter requirements.	Minn. R. 7007.0800, subp. 2 and 14
The fabric filter (CE 012) may be operated at all times when an associated emission unit is in operation other than for Emission Units 038 and 039. See CE 012 for fabric filter requirements.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020 (G)

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-9** 07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** GP 005 EU 012 Dryer Control Equipment**Associated Items:** CE 009 Centrifugal Collector - Medium Efficiency

CE 010 Electrified Filter Bed

SV 002 Dryer Stack

SV 013 Dryer Bypass Stack

What to do	Why to do it
EMISSION LIMITS AND OPERATIONAL REQUIREMENTS	hdr
The Permittee shall operate and maintain the control equipment such that they achieve an overall control efficiency for Total Particulate Matter: greater than or equal to 61 percent control efficiency	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the control equipment such that they achieve an overall control efficiency for Particulate Matter < 10 micron: greater than or equal to 61 percent control efficiency	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the control equipment such that they achieve an overall control efficiency for PM < 2.5 micron: greater than or equal to 61 percent control efficiency	Minn. R. 7007.0800, subps. 2 and 14

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-10**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** EU 007 Slab & Edge Chipper**Associated Items:** SV 015 Slab & Edge Chipper Stack

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity.	Minn. R. 7011.0715, subp. 1(B)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

A-11 07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** EU 012 Heil Triple Pass Rotary Dryer**Associated Items:** CE 009 Centrifugal Collector - Medium Efficiency

CE 010 Electrified Filter Bed

SV 002 Dryer Stack

SV 013 Dryer Bypass Stack

What to do	Why to do it
<b>EMISSION AND OPERATIONAL LIMITS</b>	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0610, subp. 1(A)(1)
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
Temperature: less than or equal to 1,000 degrees F using 3-hour Rolling Average (dryer inlet temperature) until a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average temperature recorded during the most recent performance test where compliance was demonstrated.	Minn. R. 7007.0800, subp. 2
Fuel Usage: less than or equal to 1,875 lbs/hour using 3-hour Rolling Average (at 0 percent moisture) until a new limit is set pursuant to Minn. R. 7017.2025, subp. 3, based on the fuel usage recorded during the most recent performance test where compliance was demonstrated.	Minn. R. 7007.0800, subp. 2
Production: less than or equal to 12 tons/hour using 3-hour Rolling Average (at 0 percent moisture) until a new limit is set pursuant to Minn. R. 7017.2025, subp. 3, based on the fuel usage recorded during the most recent performance test where compliance was demonstrated.	Minn. R. 7007.0800, subp. 2
Fuel Type: Wood waste as defined in Minn. R. 7011.1201, subp. 48.	Minn. R. 7005.0100, subp. 35a
<b>MONITORING AND RECORDKEEPING</b>	hdr
Daily Recordkeeping and Fuel Usage: On each day of operation, the Permittee shall calculate, record, and maintain the total fuel use. This shall be based on throughput logs, meters, and/or delivery records. In addition, the Permittee shall record the fuel usage each hour at 0 percent moisture. The Permittee shall notify the Agency in writing within 15 days of any exceedances of the limit above.	Minn. R. 7007.0800, subps. 4 and 5
Temperature: The Permittee shall make a continuous hard copy or electronic record of the inlet temperature of the dryer. The Permittee shall notify the MPCA in writing within 15 days of any exceedances of the limit above.	Minn. R. 7007.0800, subps. 4 and 5
Production rates: The Permittee shall record the amount of product produced each hour at 0 percent moisture. The Permittee shall notify the Agency in writing within 15 days of any exceedances of the limit above.	Minn. R. 7007.0800, subps. 4 and 5
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - inlet temperature is outside the required operating range; - fuel usage is outside the required operating range; - production is outside the required operating range;  Corrective actions shall return the operation of the equipment to within the permitted range and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subps. 4, 5 & 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording information as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the unit is in operation.	Minn. R. 7007.0800, subp. 4
<b>POLLUTION CONTROL EQUIPMENT REQUIREMENTS</b>	hdr
The pollution control equipment (CE 009 and CE 010) shall be operated at all times when the emission unit is in operation. See CE 009 CE 010 and GP 005 for control requirements.	Minn. R. 7007.0800, subps. 2 and 14
<b>SPECIFIC PERFORMANCE TESTING</b>	hdr
Performance Test: due 60 days after Startup to demonstrate compliance with PM, Opacity and operating limits and, if necessary, establish new operational limits.	Minn. R. 7017.2020, subp. 1



**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-12** 07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** EU 013 200 hp Hammermill**Associated Items:** CE 011 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 003 200 hp Hammermill

What to do	Why to do it
EMISSION LIMITS AND OPERATIONAL REQUIREMENTS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity.	Minn. R. 7011.0715, subp. 1(B)
POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The fabric filter (CE 011) shall be operated at all times when the emission unit is in operation. See CE 011 for fabric filter requirements.	Minn. R. 7007.0800, subps. 2 and 14

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-13** 07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** EU 014 100 hp Hammermill**Associated Items:** CE 013 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 016 100 hp Hammermill Stack

What to do	Why to do it
EMISSION LIMITS AND OPERATIONAL REQUIREMENTS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity.	Minn. R. 7011.0715, subp. 1(B)
POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The fabric filter (CE 013) shall be operated at all times when the emission unit is in operation. See CE 013 for fabric filter requirements.	Minn. R. 7007.0800, subps. 2 and 14
PERFORMANCE TESTING	hdr
Performance Test: due 60 days after Startup to demonstrate compliance with permit requirements and establish new operational limits.	Minn. R. 7017.2020, subp. 1; Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-14**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** EU 019 Fire Pump**Associated Items:** SV 005 Fire Pump

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	hdr
Opacity: less than or equal to 20 percent once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input using 3-hour Rolling Average <0.29 lbs/million Btu for PTE calculations>	Minn. R. 7011.2300, subp. 2
Fuel type: No. 2 fuel oil only.	Minn. R. 7005.0100, subp. 35a
Sulfur Content of Fuel: less than or equal to 0.5 percent by weight of diesel fuel.	Minn. R. 7007.0800, subp. 2
RECORDINGKEEPING REQUIREMENTS	hdr
Hours of Operation: The Permittee shall maintain documentation on site that the unit is an emergency diesel generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, limiting operation to 500 hours per year.	Minn. R. 7007.0800, subps. 4 & 5
Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of No. 2 fuel oil, certifying that the sulfur content does not exceed 0.5% by weight.	Minn. R. 7007.0800, subps. 4 & 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-15**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** EU 020 Emergency Generator**Associated Items:** SV 006 Emergency Generator

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	hdr
Opacity: less than or equal to 20 percent once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input using 3-hour Rolling Average <0.29 lbs/million Btu for PTE calculations>	Minn. R. 7011.2300, subp. 2
Fuel type: No. 2 fuel oil only.	Minn. R. 7005.0100, subp. 35a
Sulfur Content of Fuel: less than or equal to 0.5 percent by weight of diesel fuel.	Minn. R. 7007.0800, subp. 2
RECORDINGKEEPING REQUIREMENTS	hdr
Hours of Operation: The Permittee shall maintain documentation on site that the unit is an emergency diesel generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, limiting operation to 500 hours per year.	Minn. R. 7007.0800, subps. 4 & 5
Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of No. 2 fuel oil, certifying that the sulfur content does not exceed 0.5% by weight.	Minn. R. 7007.0800, subps. 4 & 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-16**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** EU 021 Lumber Kiln**Associated Items:** SV 007 Lumber Kiln Vent 1

SV 008 Lumber Kiln Vent 2

SV 009 Lumber Kiln Vent 3

SV 010 Lumber Kiln Vent 4

SV 011 Lumber Kiln Vent 5

SV 012 Lumber Kiln Vent 6

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity.	Minn. R. 7011.0715, subp. 1(B)
The Permittee shall comply with the requirements of 40 CFR pt. 63, subp. DDDD.	40 CFR Part 63, Subpart DDDD

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-17** 07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** EU 022 Gluing Operations**Associated Items:** SV 014 Carter Day Baghouse

SV 017 Building Ventilation for Internally Venting Units

What to do	Why to do it
EMISSION AND OPERATIONAL REQUIREMENTS	hdr
Material Usage: less than or equal to 1099 gallons/year using 12-month Rolling Sum (of coatings in the source category defined in paragraph 40 CFR 63.4681(a)) to be calculated by the 15th day of each month for the previous 12-month period using the daily records as described later in this permit.	40 CFR Section 63.4681(b), Minn. R. 7007.0800, subp. 2
MONITORING AND RECORDKEEPING	hdr
Daily Recordkeeping. On each day of operation, the Permittee shall calculate, record, and maintain the total quantity of all coatings used (in the source category defined in paragraph 40 CFR 63.4681(a)). This shall be based on written usage logs, flowmeters, and/or delivery records.	Minn. R. 7007.0800, subp. 4 and 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-18**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** EU 023 Debarking (internally venting, uncollected, uncontrolled)**Associated Items:** SV 014 Carter Day Baghouse

SV 017 Building Ventilation for Internally Venting Units

What to do	Why to do it
EMISSION AND OPERATIONAL LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity.	Minn. R. 7011.0715, subp. 1(B)

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-19**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item: EU 062 Outside Wood Hog**

<b>What to do</b>	<b>Why to do it</b>
EMISSION AND OPERATIONAL LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity.	Minn. R. 7011.0715, subp. 1(B)



**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-20**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** CE 009 Centrifugal Collector - Medium Efficiency**Associated Items:** EU 012 Heil Triple Pass Rotary Dryer

GP 005 EU 012 Dryer Control Equipment

What to do	Why to do it
OPERATIONAL REQUIREMENTS (See GP 005 for Efficiency Requirements)	hdr
The Permittee shall operate and maintain the cyclone at all times that any emission unit controlled by the cyclone is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the cyclone in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subps. 2 and 14
B. MONITORING AND RECORDKEEPING	hdr
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; - the cyclone or any of its components are found during the inspections to need repair. Corrective actions shall return the operation to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the cyclone. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subps. 4 and 5
Periodic Inspections: At least once per calendar year in which the dryer has operated, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subps. 4 and 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-21**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** CE 010 Electrified Filter Bed**Associated Items:** EU 012 Heil Triple Pass Rotary Dryer

GP 005 EU 012 Dryer Control Equipment

What to do	Why to do it
<b>OPERATIONAL REQUIREMENTS</b> (See GP 005 for Efficiency Requirements)	hdr
The Permittee shall operate and maintain the EFB at all times that any emission unit controlled by the EFB is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subps. 2 and 14
Pressure Drop: greater than or equal to 4 inches of water column and less than or equal to 9 inches of water column, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the pressure drop once every 24 hours when in operation during inclement weather.	Minn. R. 7007.0800, subps. 2 and 14
Voltage: The ionizing voltage no less than 40 KV and the filter bed voltage at no less than 10 KV, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the pressure drop once every 24 hours when in operation.	Minn. R. 7007.0800, subps. 2 and 14
Temperature: less than or equal to 30 degrees F using 3-hour Rolling Average, above the dewpoint of the exhaust gases at the outlet of the EFB, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the temperature once every 24 hours when in operation.	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the EFB in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subps. 2 and 14
Visible Emissions: The Permittee shall check the stack for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop, once each day of operation.	Minn. R. 7007.0800, subps. 2 and 14
<b>MONITORING AND RECORDKEEPING</b>	hdr
Recordkeeping of Visible Emissions, Pressure Drop, Voltage, Temperature and Dewpoint: The Permittee shall record the time and date of each visible emission inspection, pressure drop and voltage reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop, voltage, temperature and dew point was within the range specified in this permit.  Visible emissions checks and pressure drop readings shall be conducted once each day of operation. During inclement weather, the Permittee shall read and record the pressure drop and document the reason a visible emission check was not conducted.	Minn. R. 7007.0800, subps. 4 and 5
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subps. 4, 5 & 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording the information as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the control equipment is in operation.	Minn. R. 7007.0800, subp. 4

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-22**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** CE 011 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 013 200 hp Hammermill

What to do	Why to do it
<b>EMISSION LIMITS AND OPERATIONAL REQUIREMENTS</b>	hdr
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 84 percent control efficiency	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Particulate Matter < 10 micron: greater than or equal to 84 percent control efficiency	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for PM < 2.5 micron: greater than or equal to 84 percent control efficiency	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subps. 2 and 14
Visible Emissions: The Permittee shall check the fabric filter stack for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation.	Minn. R. 7007.0800, subps. 2 and 14
Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 5 inches of water column, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the pressure drop once every 24 hours when in operation during inclement weather.	Minn. R. 7007.0800, subps. 2 and 14
<b>MONITORING AND RECORDKEEPING</b>	hdr
Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit.  Visible emissions checks and pressure drop readings shall be conducted once each day of operation. During inclement weather, the Permittee shall read and record the pressure drop and document the reason a visible emission check was not conducted.	Minn. R. 7007.0800, subps. 4 and 5
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subps. 4, 5 & 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	Minn. R. 7007.0800, subp. 4
<b>PERFORMANCE TESTING</b>	hdr
Performance Test: due before end of each 60 months starting 05/15/2008 to demonstrate compliance with permit requirements and establish new operational limits. The demonstration (mass balance) will be performed while operating under parameters producing the worse case pollutant emission rates (feed rate, wood species, sander condition, etc.) to verify the overall control efficiency(s) for PM and PM10.  The permittee may demonstrate compliance through sampling or an alternative widely-accepted method approved in writing from the MPCA.	Minn. R. 7017.2020, subp. 1; Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-23**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** CE 012 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 029 Vertical Resaw (internally venting, uncollected, uncontrolled)

EU 034 Trimmer Saw

EU 035 Ripper Saw

EU 036 22AL Moulder

EU 038 24" Sander 1

EU 039 24" Sander 2

EU 040 Ripper Saw

EU 041 Splitter Saw

EU 043 Planner

EU 044 Planner

EU 051 24" Band Saw

EU 052 Trim Saw 1

EU 055 Trimmer 2

EU 063 Frame Saw #1

EU 064 Frame Saw #2

EU 065 Frame Saw #3

EU 066 Frame Saw #4

EU 067 52" Sander #1

EU 068 52" Sander #2

EU 069 Rip Saw

EU 070 24" Double Planer

EU 071 Optimizing Saw

EU 077 Rip Saw

EU 079 Ripper Saw

GP 003 Wood Working Equipment Vented to CE 012

What to do	Why to do it
The operation of this control device is not necessary in order for the process and source to meet applicable emission limits. However, if the Permittee wishes to take credit for operation of this device for purposes of reporting actual emissions for the emissions inventory, then the Permittee must comply with the following requirements.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020 (G)
The Permittee shall operate and maintain the control equipment at all times that any process equipment controlled by the control equipment (listed above under Associated Items) is operating. The Permittee shall operate and maintain the control equipment in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020 (G)
EMISSION LIMITS AND OPERATIONAL REQUIREMENTS	hdr
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 79 percent control efficiency	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020 (G)
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for PM < 10 micron: greater than or equal to 79 percent control efficiency	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020 (G)
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for PM < 2.5 micron: greater than or equal to 79 percent control efficiency	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020 (G)
The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020 (G)

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-24**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

Visible Emissions: The Permittee shall check the fabric filter stack for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020 (G)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 10 inches of water column, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the pressure drop once every 24 hours when in operation during inclement weather.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020 (G)
The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020 (G)
<b>MONITORING AND RECORDKEEPING</b>	hdr
Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit.  Visible emissions checks and pressure drop readings shall be conducted once each day of operation. During inclement weather, the Permittee shall read and record the pressure drop and document the reason a visible emission check was not conducted.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020 (G)
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020 (G)
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020 (G)
<b>PERFORMANCE TESTING</b>	hdr
Performance Test: due before end of each 60 months starting 05/15/2008 to demonstrate compliance with permit requirements and establish new operational limits. The demonstration (mass balance) will be performed while operating under parameters producing the worse case pollutant emission rates (feed rate, wood species, sander condition, etc.) to verify the overall control efficiency(s) for PM and PM10.  The Permittee may demonstrate compliance through sampling or an alternative widely-accepted method approved in writing from the MPCA.	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020 (G)

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-25**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item:** CE 013 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 014 100 hp Hammermill

What to do	Why to do it
<b>EMISSION LIMITS AND OPERATIONAL REQUIREMENTS</b>	hdr
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 84 percent control efficiency	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Particulate Matter < 10 micron: greater than or equal to 84 percent control efficiency	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for PM < 2.5 micron: greater than or equal to 84 percent control efficiency	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subps. 2 and 14
Visible Emissions: The Permittee shall check the fabric filter stack for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation.	Minn. R. 7007.0800, subps. 2 and 14
Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 5 inches of water column, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the pressure drop once every 24 hours when in operation during inclement weather.	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subps. 2 and 14
<b>MONITORING AND RECORDKEEPING</b>	hdr
Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit.  Visible emissions checks and pressure drop readings shall be conducted once each day of operation. During inclement weather, the Permittee shall read and record the pressure drop and document the reason a visible emission check was not conducted.	Minn. R. 7007.0800, subps. 4 and 5
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subps. 4, 5 & 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	Minn. R. 7007.0800, subp. 4

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-26**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

**Subject Item: CE 015 Fabric Filter - Low Temperature, i.e., T<180 Degrees F****Associated Items:** EU 072 Up Cut Trim Saw

EU 073 10 ft Panel Saw

EU 074 37-3 Sander

EU 075 Unitmat 500 Moulder

EU 076 Double End Tenoner

EU 078 Wood Hog

What to do	Why to do it
EMISSION LIMITS AND OPERATIONAL REQUIREMENTS	hdr
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 84 percent control efficiency	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for PM < 10 micron: greater than or equal to 84 percent control efficiency	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for PM < 2.5 micron: greater than or equal to 84 percent control efficiency	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subps. 2 and 14
Visible Emissions: The Permittee shall check the fabric filter stack for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation.	Minn. R. 7007.0800, subps. 2 and 14
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 10 inches of water column, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the pressure drop once every 24 hours when in operation during inclement weather.	Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subps. 2 and 14
MONITORING AND RECORDKEEPING	hdr
Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit.  Visible emissions checks and pressure drop readings shall be conducted once each day of operation. During inclement weather, the Permittee shall read and record the pressure drop and document the reason a visible emission check was not conducted.	Minn. R. 7007.0800, subps. 4 and 5
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subps. 4, 5 and 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	Minn. R. 7007.0800, subp. 4
PERFORMANCE TESTING	hdr

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-27**

07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

Performance Test: due before end of each 60 months starting 05/15/2008 to demonstrate compliance with permit requirements and establish new operational limits. The demonstration (mass balance) will be performed while operating under parameters producing the worse case pollutant emission rates (feed rate, wood species, sander condition, etc.) to verify the overall control efficiency(s) for PM and PM10.

The Permittee may demonstrate compliance through sampling or an alternative widely-accepted method approved in writing from the MPCA.

Minn. R. 7017.2020, subp. 1; Minn. R. 7007.0800, subp. 2



## TABLE B: SUBMITTALS

B-1 07/15/10

Facility Name: Hill Wood Products  
Permit Number: 13700030 - 003

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak  
Air and Radiation Branch  
EPA Region V  
77 West Jackson Boulevard  
Chicago, Illinois 60604

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency  
Clean Air Markets Division  
1200 Pennsylvania Avenue NW (6204N)  
Washington, D.C. 20460

Send any application for a permit or permit amendment to:

AQ Permit Technical Advisor  
Industrial Division  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
St. Paul, Minnesota 55155-4194

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Unless another person is identified in the applicable Table, send all other submittals to:

AQ Compliance Tracking Coordinator  
Industrial Division  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
St. Paul, Minnesota 55155-4194

**TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS****B-2** 07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

<b>What to send</b>	<b>When to send</b>	<b>Portion of Facility Affected</b>
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup of EU 012.	EU012
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup of EU 014.	EU014
Testing Frequency Plan	due 60 days after Performance Test The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	EU012
Testing Frequency Plan	due 60 days after Performance Test The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	EU014

**TABLE B: RECURRENT SUBMITTALS****B-3** 07/15/10

Facility Name: Hill Wood Products

Permit Number: 13700030 - 003

<b>What to send</b>	<b>When to send</b>	<b>Portion of Facility Affected</b>
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 02/28/2006 . The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 30 days after end of each calendar year starting 02/28/2006 (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

## APPENDIX MATERIAL

Facility Name: Hill Wood Products  
Permit Number: 13700030-003

### APPENDIX B: Insignificant Activities and Applicable Requirements

<b>Minn. R. 7007.1300, subpart</b>	<b>Rule Description of the Activity</b>	<b>Applicable Requirement</b>
3(E)(1)	Gasoline storage tank	Minn. R. 7011.1505, subp. 3
3(E)(2)	Glue storage	Minn. R. 7011.1505, subp. 3
3(H)	Miscellaneous:	
	3. brazing, soldering or welding equipment;	Minn. R. 7011.0715
3(K)	Periodic painting	Minn. R. 7011.0715

These Insignificant Emission Units (IEU) are subject to the state general applicable requirements. It is our belief that IEU's listed in Appendix B to the permit associated with inconsequential environmental impacts and present little potential for violations of generally applicable requirements, therefore no monitoring will be required.

## Appendix C: PM<sub>10</sub> Modeling Parameters

### Air Dispersion Modeling Point Source Parameters for Hill Wood Products (All Avg. Times)

SRCID	X Coord.	Y Coord.	Elevation	Emis. Rate	Stack Height	Temp	Exit Velocity	Stack Diameter
	<i>m</i>	<i>m</i>	<i>m</i>	<i>g/s</i>	<i>m</i>	<i>K</i>	<i>m/s</i>	<i>m</i>
SV001	522,816.51	5,301,071.53	408.84	0.529	18.288	405.37	4.287	0.99
SV002	522,868.65	5,301,119.95	409.28	2.066	19.202	352.59	24.38	1.14
SV005	522,798.34	5,300,965.60	403.91	0.023	1.219	394.26	0.000	0.10
SV006	522,875.82	5,301,114.45	409.15	0.151	2.438	394.26	0.000	0.15
SV014S	522,805.28	5,301,088.05	408.97	0.454	12.19	294.26	13.34	1.14
SV014W	522,805.28	5,301,088.05	408.97	0.539	12.19	294.26	13.34	1.14
SV015	522,799.52	5,301,066.22	408.65	0.144	6.706	294.26	3.450	0.91
SV018	522,755.19	5,301,087.29	409.27	0.183	6.096	294.26	6.064	1.22
HOG	522,880.39	5,301,061.79	408.58	0.088	6.706	294.26	3.450	0.91

S: Summer (Mar. - Nov.); W: Winter (Dec. - Feb.)

### Air Dispersion Modeling Volume Source Parameters for Hill Wood Products (All Avg. Times)

SRCID	X Coord.	Y Coord.	Elevation	Emission Rate	Release Height	Initial Lateral Dim.	Initial Vertical Dim.
	<i>m</i>	<i>m</i>	<i>m</i>	<i>g/s</i>	<i>m</i>	<i>m</i>	<i>m</i>
SV017	522,835.29	5,301,064.52	408.75	1.226	3.6576	15.1	3.40
VMS_001	522,886.19	5,300,907.31	403.84	0.00479	2.4384	12.0	2.44
VMS_002	522,886.19	5,300,932.31	403.72	0.00479	2.4384	12.0	2.44
VMS_003	522,886.19	5,300,957.31	404.10	0.00479	2.4384	12.0	2.44
VMS_004	522,886.19	5,300,982.31	404.88	0.00479	2.4384	12.0	2.44
VMS_005	522,886.19	5,301,007.31	405.84	0.00479	2.4384	12.0	2.44
VMS_006	522,886.19	5,301,032.31	407.63	0.00479	2.4384	12.0	2.44
VMS_007	522,886.19	5,301,057.31	408.45	0.00479	2.4384	12.0	2.44
VMS_008	522,886.19	5,301,082.31	408.73	0.00062	2.4384	12.0	2.44
VMS_009	522,886.19	5,301,107.31	408.95	0.00062	2.4384	12.0	2.44
VMS_010	522,886.19	5,301,132.31	409.35	0.00062	2.4384	12.0	2.44
VMS_011	522,874.01	5,301,145.12	409.55	0.00062	2.4384	12.0	2.44
VMS_012	522,849.01	5,301,145.12	409.65	0.00062	2.4384	12.0	2.44

### Air Dispersion Modeling Area Polygon Source Parameters for Hill Wood Products (All Avg. Times)

SRCID	X Coord.	Y Coord.	Elevation	Emis. Rate	Release Height	Number Vertices
	<i>m</i>	<i>m</i>	<i>m</i>	<i>g/s</i>	<i>m</i>	<i>#</i>
WOODPILE	522,900.80	5,301,158.64	411.50	2E-06	4.572	13

**Air Dispersion Modeling Area Polygon Vertices for Hill Wood Products (All Avg. Times)**

SRCID	X Coord.	Y Coord.	Vertice #
	<i>m</i>	<i>m</i>	
WOODPILE	522,900.80	5,301,158.64	1
WOODPILE	522,950.94	5,301,158.58	2
WOODPILE	522,962.95	5,301,174.39	3
WOODPILE	522,962.95	5,301,219.03	4
WOODPILE	523,010.06	5,301,218.88	5
WOODPILE	523,048.58	5,301,132.52	6
WOODPILE	522,967.66	5,301,132.69	7
WOODPILE	522,954.83	5,301,094.40	8
WOODPILE	522,954.83	5,301,053.55	9
WOODPILE	522,940.43	5,301,016.76	10
WOODPILE	522,913.98	5,301,015.82	11
WOODPILE	522,913.98	5,301,129.80	12
WOODPILE	522,900.80	5,301,129.76	13

**TECHNICAL SUPPORT DOCUMENT**  
**For**  
**AIR EMISSION PERMIT NO. 13700030-003**

This technical support document (TSD) is intended for all parties interested in the permit and to meet the requirements that have been set forth by the federal and state regulations (40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp. 1). The purpose of this document is to provide the legal and factual justification for each applicable requirement or policy decision considered in the determination to issue the permit.

**1. General Information**

**1.1 Applicant and Stationary Source Location:**

**Table 1. Applicant and Source Address**

<b>Applicant/Address</b>	<b>Stationary Source/Address (SIC Code: 2421)</b>
Hill Wood Products, Inc. 9483 Ashawa Rd Cook, MN 55723	Hill Wood Products, Inc. 9483 Ashawa Rd Cook, St. Louis County, MN 55723
Contact: Steven Hill Phone: 218-666-5933	

**1.2 Facility Description**

Hill Wood Products is a sawmill and lumber processing facility. The facility purchases birch logs rough cut wood to produce various wood products including wood pallets, wood biscuits, and flooring. The facility sources include:

- Two boilers and dryer combustion sources. The boilers and dryer burn wood waste. The dryer dries wood waste for use as fuel. The dryer has an EFB and cyclone for emissions control. The boilers provide steam for a lumber kiln.
- Particulate emissions include sources such as debarking, skragging, sawing, trimming, molding, sanding, hammermills, and storage silos. These sources are controlled and vented in a number of ways.
  - A Carter Day baghouse controls and vents most woodworking equipment. The baghouse vents externally.
  - Two hammermills each with baghouses that vent externally.
  - Log debarking, sawing and a tenoner - vent internally without controls.
  - Sanders – two sanders.
  - Slab and edge chipper vents externally without controls.
  - Wood hogs (2).
- Miscellaneous sources such as an emergency fire pump, and an emergency generator.

### **1.3 Description of the Activities Allowed by this Permit Action**

Non-permitted equipment was documented by MPCA staff during a routine site inspection at Hill Wood Products in August 2007. Also included in the documentation from follow-up meetings with Hill Wood staff were the facility's failures to conduct specific equipment emission performance tests and visual emission inspections, monitor and record operating parameters, calculate and record daily fuel use, provide an operations and maintenance plan for its emission control equipment and produce all required records. These findings led to the signing of a Stipulation Agreement on October 13, 2008. A copy of this agreement is attached to this TSD.

This major amendment will incorporate 17 emission units, two fugitive sources and one baghouse into the permit and delete 21 removed emission units, one baghouse and a stack vent from the permit. Sander No. 1 and No. 2 (EU038 & 039) will be rerouted from the removed to an existing baghouse (CE012). The same will be done for an existing saw (EU029). A like-kind replacement of EU044 was made. The make of the new unit replacing EU044 is Nortec. Also, a reopening will amend the heat input limit for EU001 and EU002 to equal to or less than 4.2 mmBtu/hr (previously 6.7 mmBtu/hr) based on the results of stack testing.

**Table 2. New, Removed, and Replaced/Rerouted Emission Units**

<b>New EU</b>	<b>Removed EU (1/1/07)*</b>	<b>Replaced/Rerouted EU</b>
063 Frame Saw #1	018 Extruder	044 Planer (replaced)
064 Frame Saw #2	030 Moulder 1	029 Vertical Resaw (rerouted)
065 Frame Saw #3	031 Moulder 2	038 24" Sander 1 (rerouted)
066 Frame Saw #4	032 Bandsaw	039 24" Sander 2 (rerouted)
067 52" Sander #1	033 Moulder	
068 52" Sander #2	037 Fame Saw	
069 Rip Saw	042 Shaper	
070 24" Double Planer	045 Chuck & Boring	
071 Optimizing Saw	046 Dowel Sander	
072 Up Cut Trim Saw	047 Chuck & Boring	
073 10 ft Panel Saw	048 Dowel Sander	
074 37-3 Sander	049 Dowel Machine	
075 Unimat 500 Moulder	050 Dowel Machine	
076 Double End Tenoner	053 Trim Saw 2	
077 Rip Saw	054 Trimmer 1	
078 Wood Hog	056 Rotary Trimmer 1	
079 Ripper Saw	057 Rotary Trimmer 2	
	058 Chuck & Boring	
	059 Dowel Sander	
	060 Dowel Trimmer	
	061 Double End Tenoner	

\*: EU 003-006, 008-011 and 015-017 were removed prior to this amendment and assigned removal date of 1/1/06

Hill Wood Products also requests a number of permit language and regulatory citation corrections to the permit. They include the removal of requirements to submit testing frequency



plans for incorporation in the permit. This major amendment will also incorporate performance testing for EU012 and EU014 within 60 days after startup as explained in the Stipulation Agreement. This amendment will also incorporate authorization to operate the new flooring plant. One-time performance testing will be updated to periodic performance testing on a 60-month frequency for EU001, EU002, CE011, CE012, and CE015.

Modeling protocol for permit action -001 was submitted but not reviewed by MPCA staff for this facility at the time of this amendment. This facility was included in a list of facilities that showed potential for exceeding National Ambient Air Quality Standards (NAAQS) for PM<sub>10</sub> during permit action -001. The TSD for PER001 stated: "The permittee is required to submit a modeling protocol and conduct the modeling after permit issuance to resolve (the PM<sub>10</sub> NAAQS) issue. The facility will have to demonstrate compliance with the NAAQS." See modeling discussion below (section 3.5) showing that Hill Wood now shows compliance with PM<sub>10</sub> NAAQS.

#### 1.4. Facility Emissions:

**Table 3. Title I Emissions Increase Summary**

<b>Pollutant</b>	<b>Emissions Increase from the Modification (tpy)*</b>	<b>Limited Emissions Increase from the Modification (tpy)*</b>	<b>Net Emissions Increase (tpy)**</b>	<b>PSD/112(g) Significant Thresholds for major sources (tpy)</b>	<b>NSR/ 112(g) Review Required? (Yes/No)</b>
PM	14.30	14.30	-26.3	25	No
PM <sub>10</sub>	13.75	13.75	-14.2	15	No
PM <sub>2.5</sub>	5.55	5.55		10	No
NO <sub>x</sub>	0.0	0.0	0***	40	No
SO <sub>2</sub>	0.0	0.0	0***	40	No
CO	0.0	0.0	-0.1	100	No
Ozone (VOC)	0.0	0.0	-4.1	40	No
Lead	0.0	0.0	0***	0.6	No
individual and total HAPs	0.0	0.0	0.0 (form) -1.39 total	10/25	No

\* Emissions increases from new emission units (EU063-079)

\*\* Emissions change when removed emission units are accounted; (form) = formaldehyde

\*\*\* NO<sub>x</sub>, SO<sub>2</sub>, and Pb PTE for EU012 was corrected from PER001, PTE change depicted in public notice

**Table 4. Total Facility Potential to Emit Summary**

	<b>PM</b> tpy	<b>PM<sub>10</sub></b> tpy	<b>PM<sub>2.5</sub></b> tpy	<b>SO<sub>2</sub></b> tpy	<b>NO<sub>x</sub></b> tpy	<b>CO</b> tpy	<b>VOC</b> tpy	<b>Pb</b> tpy	<b>Single HAP</b> tpy	<b>All HAPs</b> tpy
Total Facility Limited Potential Emissions	207.4	165.6	155.3	6.10	66.21	324.4	86.28	0.0112	17.95 Formald ehyde	28.81
Total Facility Actual Emissions (2007)	26.87	17.04	NA	0.05	2.01	16.22	13.35	0.00	HAPs not reported in emission inventory	

**Table 5. Facility Classification**

<b>Classification</b>	<b>Major/Affected Source</b>	<b>Synthetic Minor</b>	<b>Minor</b>
PSD	CO		PM, PM <sub>10</sub> , PM <sub>2.5</sub> , NO <sub>x</sub> , SO <sub>2</sub> , VOC
Part 70 Permit Program	PM <sub>10</sub> , PM <sub>2.5</sub> , CO		NO <sub>x</sub> , SO <sub>2</sub> , VOC
Part 63 NESHAP	X		

## **2. Regulatory and/or Statutory Basis**

### New Source Review

The facility is an existing major source under New Source Review regulations for CO emissions. No further changes are authorized by this permit.

### Part 70 Permit Program

The facility is a major source under the Part 70 permit program for PM<sub>10</sub>, PM<sub>2.5</sub>, CO and HAPs.

### New Source Performance Standards (NSPS)

There are no New Source Performance Standards applicable to the operations at this facility.

### National Emission Standards for Hazardous Air Pollutants (NESHAP)

NESHAP subp. DDDDD was vacated; NESHAP subp. JJ applicable EU removed. This facility remains subject to subps. DDDD, QQQQ and ZZZZ.

### Compliance Assurance Monitoring (CAM)

CAM does not apply to the modification allowed in this permit amendment.

### Environmental Review & AERA

The facility's emissions increase from new units is not subject to environmental review, i.e. an Environmental Assessment Worksheet (EAW), and is not required to perform an Air Emissions Risk Analysis (AERA).

### Minnesota State Rules

Portions of the facility are subject to the following Minnesota Standards of Performance:

- Minn. R. 7011.0510 Standards of Performance for Existing Indirect Heating Equipment
- Minn. R. 7011.0610 Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment
- Minn. R. 7011.0710 and 7011.0715 Standards of Performance for Pre- and Post-1969 Industrial Process Equipment
- Minn. R. 7011.2300 Standards of Performance for Stationary Internal Combustion Engines
- Minn. R. 7011.0070 Listed Control Equipment and Control Equipment Efficiencies

**Table 6. Regulatory Overview of Units Affected by the Modification/Permit Amendment**

Level*	Applicable Regulations	Comments:
GP001	40 CFR pt. 63, subp. DDDDD (vacated)	This NESHAP was vacated and the applicable requirement was removed from the permit.
EU018	40 CFR pt. 63, subp. JJ	This EU was removed from the facility so no longer subject to NESHAP subp. JJ.
CE015	Minn. R. 7011.0070	Listed Control Equipment and Control Equipment Efficiencies

\*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

### **3. Technical Information**

**Control Equipment updates:** The pollution control tab of the facility description was updated in this permit action. CE009 and CE010 are connected in series leaving EU012. The cyclone (CE009) collects emissions coming from EU012 before they are sent to the electrified filter bed (EFB; CE010). CE009 and CE010 are associated with GP005 with a permitted overall efficiency of  $\geq 61\%$ . CE009 has 100% capture with an estimated 80% collection efficiency based on U.S. Environmental Protection Agency fact sheets. CE010 has 100% capture with 61% collection.

CE011 and CE013 have 100% capture with 99% collection efficiency. CE012 and CE015 each have 94% capture and 99% collection efficiency. These units of control equipment each have overall efficiencies greater than the permitted minimum overall control efficiency. CE014 was removed. Efficiencies for  $PM_{2.5}$  were added for all active CE units.

**Reopening:** A performance test was conducted May 13-15, 2008, on Boilers 1 and 2. Each of the boilers showed compliance with permitted limits on total particulate matter (PM) and opacity. The reopening for GP001 boilers will amend the heat input limit for each boiler to less than or equal to 4.2 MMBtu/hr (previously  $\leq 6.7$  MMBtu/hr). PTE will remain based on 6.7 MMBtu/hr.

**Performance Testing:** One-time testing was placed in permit action -001. This permit action will replace one-time with periodic performance testing on a 60-month frequency based on the results from tests conducted May 13-15, 2008. After completion of the periodic performance tests, the Permittee has the option of conducting a performance test once every 10 years for emissions inventory and emission factor purposes used for determining the facility's potential to emit.

**Stipulation Agreement:** A Stipulation Agreement between Hill Wood Products (HWP) and Minnesota Pollution Control Agency (MPCA) was signed October 13, 2008. The agreement lists

requirements and actions HWP shall complete to return the facility to compliance. Several examples of non-compliance were discovered and later documented by MPCA staff following a routine site inspection in August 2007. These examples include: documenting unpermitted equipment at the facility, failures to conduct specific equipment emission performance tests and visual emission inspections, monitor and record operating parameters, calculate and record daily fuel use, provide an operations and maintenance plan for its emission control equipment and produce all required records. As a result of the agreement, HWP paid an \$11,550 civil penalty. The agreement also required HWP to submit a permit application to incorporate authorization to operate their veneer plant, new flooring plant, and include performance testing requirements for the wood refuse fuel processing units (EU012 & EU014) within 60 days of startup. This permit action will incorporate emission units associated with the veneer and new flooring plants as well as performance test requirements for EU012 and EU014 into the permit. Incorporating these items into the permit will thus terminate the Stipulation Agreement. All other listed requirements in the agreement have been completed (see attached Stipulation Agreement).

**NAAQS Issue:** A National Ambient Air Quality Standards (NAAQS) letter was sent to Mr. Steven Hill, President of Hill Wood Products on June 21, 2005. The letter explained the facility showed potential of exceeding NAAQS for PM<sub>10</sub>. Since then, the facility submitted modeling protocol and based on results from additional screening modeling, the facility continued to indicate it may not meet PM<sub>10</sub> NAAQS. According to the TSD for permit action -001, “the permittee is required to submit a modeling protocol and conduct the modeling after permit issuance to resolve this issue”. The initial modeling protocol from permit action -001 was not approved or reviewed by MPCA at the time of this permit action. The facility resubmitted its protocol and modeling with this permit action and as of now, it appears the NAAQS issue is resolved. (See modeling discussion below.)

**Miscellaneous Items:** Since the application was submitted, EU071 was replaced at the facility with an optimizing saw (previously a 12 ft trimmer). Also, a ripper saw (EU079) was left out of the original application. Updated GI-05B forms and Potential-to-Emit (PTE) calculation spreadsheets were sent electronically June 10, 2009, reflecting these changes. HAP emissions were updated for EU001 and EU002. Overall change in total HAPs for EU001 and EU002 were almost negligible. The GP001 requirement for NESHAP subp. DDDDD was removed from the permit since this NESHAP was vacated. Permit language for EU018 and EU061 was removed as these units were removed (see Table 2). GP004 and GP006 were removed from the permit as these groups no longer have associated items. CE014 and SV004 were removed from the permit as they both were removed from the facility. EU038 and 039 were moved from GP004 to GP003 and from CE014 to CE012. EU029 moved from GP002 to GP003. PTE for removed emission units (EUs 018, 030-033, 037, 042, 045-050, 053, 054 and 056-061) was zeroed out. Units removed with this permit action (-003) were assigned a removal date of 1/1/07 and units removed during permit action -001 were assigned a removal date of 1/1/06. The maximum design capacity for EUs 023-029 were updated to tons/hr (previously logs each hour). A negligible amount of formaldehyde PTE was calculated for the fire pump (EU019) and emergency generator (EU020). “Permittee” was capitalized where applicable in the permit. Overall control efficiency limits for PM<sub>2.5</sub> were added at applicable CE levels of the permit. These control efficiencies were added for calculating PM<sub>2.5</sub> PTE and not for performance test

verification purposes. The PM<sub>10</sub> limit at CE012 was changed from “percent capture efficiency” to “percent control efficiency.” Requirement 5 of CE010 was amended for the Permittee to record the temperature once every 24 hours when in operation. Completed performance testing was changed from one-time to periodic testing with a 60-month testing frequency. Once the periodic performance tests are completed, the Permittee has the option of conducting performance tests once every 10 years for emissions inventory and emission factor purposes. Permit language was updated at the total facility level to meet current MPCA practice. Since the facility is NSR/PSD major for CO, requirements for determining if a project or modification is subject to New Source Review (NSR) were added at the total facility level. Also the permit cover page now identifies the facility as major for NSR. In a phone conversation with the consultant on 9/23/09 it was determined that SV007, 008, 009, 010, 011 and 012 are all associated with the Lumber Kiln (EU021). Wood piles (FS001) and truck traffic (FS002) were also added to the facility description and were included in the submitted PM<sub>10</sub> modeling. The NO<sub>x</sub>, SO<sub>2</sub> and Pb PTE for the dryer (EU012) was corrected with this permit action resulting in a PTE decrease in NO<sub>x</sub> and increase in SO<sub>2</sub> and Pb. Since PM<sub>10</sub> modeling was conducted with this permit action, the monitoring plan requirement at the FC level in the permit was removed. During the Permittee’s review of the draft permit, the pressure drop for CE012 was requested to be changed to equal to or greater than 0.1 inches water column and less than or equal to 10 inches water column. This change was due to moving a manometer to alleviate frequent plugging issues. A total facility submittal in Table B related to permit action -001 was removed.

### **3.1 Calculations of Potential to Emit**

Attachment 2 to this TSD contains spreadsheets of total uncontrolled and limited facility emissions.

### **3.2 Periodic Monitoring**

In accordance with the Clean Air Act, it is the responsibility of the owner or operator of a facility to have sufficient knowledge of the facility to certify that the facility is in compliance with all applicable requirements.

In evaluating the monitoring included in the permit, the MPCA considers the following:

- The likelihood of violating the applicable requirements;
- Whether add-on controls are necessary to meet the emission limits;
- The variability of emissions over time;
- The type of monitoring, process, maintenance, or control equipment data already available for the emission unit;
- The technical and economic feasibility of possible periodic monitoring methods; and
- The kind of monitoring found on similar units elsewhere.

The table below summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

**Table 7. Periodic Monitoring**

<b>Level*</b>	<b>Requirement (rule basis)</b>	<b>Additional Monitoring</b>	<b>Discussion</b>
EU012	PM <sub>10</sub> : $\leq 0.3$ gr/dscf Opacity: $\leq 20\%$ Pollution Control Equipment (Minn. R. 7007.0800)	Monitoring and Recordkeeping: Temperature, Fuel Use, Production, Fuel Type  Emissions from unit must be vented to CE009 and 010.  Performance Testing: due 60 days after startup	This unit is existing but not in operation at the facility. Performance test due 60 days after startup of unit in accordance with the October 2008 Stipulation Agreement.
EU014	Pollution Control Equipment (Minn. R. 7007.0800)	Emissions from unit must be vented to CE013.  Performance Testing: due 60 days after startup	This unit is existing but not in operation at the facility. Performance test due 60 days after startup of unit in accordance with the October 2008 Stipulation Agreement.
GP001 Applies to EU001 & EU002 individually	Heat Input: $\leq 4.2$ mmBtu/hr PM: $\leq 0.6$ lb/mmBtu Opacity: $\leq 20\%$ with exceptions  Minn. R. 7011.0510, subps. 1 & 2; Minn. R. 7007.0800, subp. 2	Daily recordkeeping of total fuel use and type	Reopening based on performance test conducted May 13-15, 2008. PTE calculations will be based on the units' rated max capacity of 6.7 mmBtu/hr.
EU001/002	Minn. R. 7017.2020, subp. 1	Performance Testing: due on or before 5/15/2013	Performance test to demonstrate compliance with permit requirements and PM and opacity limits and, if necessary, to establish new operational limits.
CE011/015	Minn. R. 7017.2020, subp. 1; Minn. R. 7007.0800, subp. 2	Performance Testing: due on or before 5/15/2013	Performance test to demonstrate compliance with permit requirements and establish new operational limits. Also, to verify overall efficiency(s) for PM and PM <sub>10</sub> .
CE012	Minn. Stat. 116.07, subd. 4a; Equipment used under Minn. R. 7019.3020(G)	Performance Testing: due on or before 5/15/2013	Performance test to demonstrate compliance with permit requirements and establish new operational limits. Also, to verify overall efficiency(s) for PM and PM <sub>10</sub> .
CE012	Pressure Drop: $\geq 0.1$ inches and $\leq 10$ inches water column  Minn. Stat. 116.07, subd. 4a; Equipment	Recordkeeping: Daily visible emission check and pressure drop reading	This pressure drop change was requested after the Permittee's review of the draft permit. It was caused by moving a manometer that had frequent plugging issues.

Level*	Requirement (rule basis)	Additional Monitoring	Discussion
	used under Minn. R. 7019.3020 (G)		

\*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

### **3.3 Insignificant Activities**

Hill Wood Products added a gasoline storage tank, glue storage and periodic painting to their list of insignificant activities. Since fugitive PM<sub>10</sub> emissions from the wood pile (FS001) and truck traffic (FS002) were used in the modeling, these activities are no longer considered insignificant.

### **3.4 Permit Organization**

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements. One area where this permit deviates slightly from Delta guidance is in the use of appendices. While appendices are fully enforceable parts of the permit, in general, any requirement that the MPCA thinks should be tracked (e.g., limits, submittals, etc.), should be in Table A or B. The main reason is that the appendices are word processing sections and are not part of the tracking system. Violation of the appendices can be enforced, but the computer system will not automatically generate the necessary enforcement notices or documents. Staff must generate these.

### **3.5 Modeling**

Modeling protocol for Hill Wood Products was approved by MPCA staff on October 5, 2009. PM<sub>10</sub> modeling was submitted by HDR on behalf of Hill Wood Products on January 4, 2010, and revised February 9, 2010 to include a wood chip pile and truck traffic at the facility. AERMOD version 09292 was used. All wood working and truck traffic emissions were limited to 12 hours per day, 7 days per week. No restrictions were placed on boilers, dryer, fire pump and emergency generator. Volume source SV017 was used to represent internally vented units that assuming emissions are being vented through open doors, windows and passive vents. During winter months (December - February) these passages are closed and therefore are sent to the Carter Day baghouse through SV014. Modeling parameters are located in Appendix C of the permit. Results are shown below in Table 8. Tier 2 modeling requirement language is being added at the FC level in the permit. Permit requirements for computer dispersion PM<sub>10</sub> modeling protocol and PM<sub>10</sub> modeling results are being removed.

The modeled impacts for 24-hr PM<sub>10</sub> were 97.6 ug/m<sup>3</sup>. With a background value of 37 ug/m<sup>3</sup> the total impacts for 24-hr PM<sub>10</sub> was 134.6 ug/m<sup>3</sup>, or 89.7% of the 24-hr PM<sub>10</sub> standard (150 ug/m<sup>3</sup>). Annual PM<sub>10</sub> modeled impacts were 17.1 ug/m<sup>3</sup> and the background value was 14 ug/m<sup>3</sup>. This yielded a total annual impact of 31.1 ug/m<sup>3</sup> which is 62.2% of the 50 ug/m<sup>3</sup> annual standard. Therefore, the air dispersion modeling for Hill Wood Products is approved by MPCA. The 24-hr result qualifies the facility for Tier 2 growth for PM<sub>10</sub>. For more detailed analysis, see the modeling review by Melissa Sheffer and the SAM spreadsheet attached to this TSD.

**Table 8. Air Dispersion Modeling Results for Hill Wood Products - NAAQS/MAAQs**

Pollutant	Averaging Time	Modeled Impacts	Background Value	Total Predicted Impacts	NAAQS/MAAQs	% of Standard	Modeling Tier
		<i>ug/m<sup>3</sup></i>	<i>ug/m<sup>3</sup></i>	<i>ug/m<sup>3</sup></i>	<i>ug/m<sup>3</sup></i>	%	
PM10	<i>24-hr</i>	97.6	37	134.6	150	89.70%	2
PM10	<i>Annual</i>	17.1	14	31.1	50	62.20%	1

### **3.6 Comments Received**

Public Notice Period: May 21, 2010 – June 21, 2010

EPA 45-day Review Period: May 21, 2010 – July 6, 2010

Comments were not received from the public during the public notice period or from EPA during 45-day review.

### **4. Permit Fee Assessment**

Attachment 6 to this TSD contains the MPCA's assessment of Application and Additional Points used to determine the permit application fee for this permit action as required by Minn. R.

7002.0019. The permit action includes a major amendment and reopening, both received before the effective date of the rule (July 1, 2009). The amendment contains a PM<sub>10</sub> modeling review which is applicable for 15 additional points.

### **5. Conclusion**

Based on the information provided by Hill Wood Products, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 13700030-003 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Tarik Hanafy (permit writer/engineer)  
Steven Palzkill (enforcement)  
Andy Place (stack testing)  
Melissa Sheffer (modeling)  
Steven Gorg (peer reviewer)

AQ File No. 1928A; DQ 2318, 2231

Attachments: 1. Facility Description and CD-01 Forms  
2. Calculation Spreadsheets  
3. Stipulation Agreement  
4. Modeling Review  
5. SAM Spreadsheet  
6. Points Calculator