AIR EMISSION PERMIT NO. 13700326-002

IS ISSUED TO

Mountain Timber Wood Products LLC

MOUNTAIN TIMBER WOOD PRODUCTS LLC
8877 Slate Street
Mountain Iron, St. Louis County, MN 55768

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application(s):

Permit Type	Application Date	Issue Date	Action
Total Facility Operating Permit	February 08, 2007	See Below	002

This permit authorizes the Permittee to 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.

Permit Type: State; Limits to Avoid Pt 70/Limits to Avoid NSR

Issue Date: July 23, 2008

Expiration: Permit does not expire
Title I Conditions do not expire.

Jeff J. Smith Manager
Air Quality Permits Section
Industrial Division

for Brad Moore
Commissioner
Minnesota Pollution Control Agency

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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:

Mountain Timber Wood Products, LLC is planning to construct a new, wood pelletizing facility in Mountain Iron, Minnesota. A mixture of hardwood and softwood will be cleaned, processed into small pieces, dried into pellets, cooled and packaged.

Process drying will emit particulate matter (PM), particulate matter less than 10 microns in diameter (PM_{10}), sulfur dioxide (SO_2), oxides of nitrogen (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), lead and 12 hazardous air pollutants (HAPs) including acetaldehyde, acrolein, benzene, formaldehyde, methanol, methylene chloride, m,p-xylene, o-xylene, phenol, propionaldehyde, styrene, and toluene. The hammermill, meal storage, pellet mills and pellet cooler will emit PM and PM_{10}. The remaining fugitive sources will also emit PM and PM_{10}. The fugitive sources include vehicle traffic, roundwood storage yard and handling, chip storage pile and handling, sawdust storage pile and handling, debarker, chipper and wood fuel handling.

The process drying system includes a multiclone system that recovers product. The multiclone system is not considered control equipment. The hammermill, meal storage, pellet mills and pellet cooler are all controlled by a baghouse.

The facility is limited to a maximum of 60 percent by cord softwood and a minimum of 40 percent by cord softwood as a calendar monthly average. The remainder of wood processed shall be hardwood. Weekly records of type of wood processed and total amount of wood processed will be compiled to determine the monthly total and average composition. In addition, total facility maximum capacity is 125,000 oven-dried tons (ODT) per year, but the facility is limited to a maximum production total of 100,000 ODT/yr to avoid classification as a major source under 40 CFR§ 70.2.

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Mountain Timber Wood Products LLC

Permit Number: 13700326 - 002

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**

What to do	Why to do it
This permit establishes limits on the facility to keep it a minor source under 40 CFR Sections 52.21, 70.2, and 63.2. The Permittee shall not make any changes at the source that would make the source a major source under 40 CFR Section 70.2, until a major amendment has been issued. This includes changes that might otherwise qualify as insignificant modifications and minor or moderate permit amendments.	Title I Condition: To avoid classification as a major source or modification under 40 CFR Section 52.21; To avoid major source classification under 40 CFR Sections 63.2 and 70.2; Minn. R. 7007.3000
OPERATIONAL LIMITS	hdr
Process Throughput: less than or equal to 100,000. tons/year using 12-month Rolling Sum measured as oven dried tons.	Title I Condition: To avoid major source classification under 40 CFR Section 70.2
Materials Usage Limitation: Wood type processed at the facility shall be limited to a maximum of 60% by cord softwood (e.g. pine) as a calendar monthly average. Wood type processed at the facility shall be limited to a minimum of 40% by cord softwood as a calendar monthly average. The remainder of the wood processed shall be hardwood. The Permittee shall maintain weekly records of the type of wood processed. The records shall include the percent by cord of the amount of softwood processed as well as the total amount of wood processed. This data shall be compiled to determine the monthly total and average composition.	Title I Condition: To avoid major source classification under 40 CFR Sections 63.2 and 70.2
Facility-wide truck limit of 71 trucks per day (grand total of all ash trucks, chip/sawdust trucks, roundwood truck, and pellet loadout trucks).	Minn. R. 7009.0200
The main processing building height shall not exceed 28.75 feet above grade.	Minn. R. 7009.0200
Equipment Labeling: The Permittee shall permanently affix a unique number to each emissions unit for tracking purposes. The numbers shall correlate the unit to the appropriate EU and GP numbers used in this permit. The number can be affixed by placard, stencil, or other means. The number shall be maintained so that it is readable and visible at all times from a safe distance.	Minn. R. 7007.0800, subp. 2
Equipment Inventory List: The Permittee shall maintain a written list of each emission unit on site. The list shall include the type of equipment, manufacturer and model number (if available), unique ID number (assigned and affixed as required by this permit), the corresponding control equipment number used to control the unit (if applicable), and the dates of installation, modification, and construction. The Permittee shall update the list to include any replaced, modified, or changed equipment prior to making the pre-authorized change. For equipment that is replaced, modified or changed, the Permittee shall complete an evaluation as detailed below and shall include a record of the evaluation as part of the equipment list.	Minn. R. 7007.0800, subp. 2
Prior to making the change, the Permittee shall determine and keep a record of the following: 1. Evaluate whether the permit contains all applicable requirements that would apply to the planned change; and 2. Re-evaluate whether the facility will continue to comply with all permit limits (e.g. annual limits for Criteria Pollutants, HAP limits, Minn. R. ch. 7011, Standards of Performance, etc.). If the answer to either is "no", the Permittee shall apply for and obtain the appropriate permit amendment as required by Minn. R. ch. 7007. These rule requirements may require that the permit amendment be issued prior to making the proposed change.	(continued)
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.	Minn. R. 7007.0800, subps. 2 & 16(J)

Facility Name: Mountain Timber Wood Products LLC

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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, subps. 14 & 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
PERFOMANCE TESTING	hdr
Conduct all performance tests in accordance with Minn. R. ch. 7017.	Minn. R. ch. 7017
Performance Test Notifications and Submittals: Performance Tests are due as outlined in Table A 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 - CD 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. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4; Minn. R. 7017.2035, subps. 1-2
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change.	Minn. R. 7017.2025
MODELING REQUIREMENTS	hdr
Parameters Used in Modeling: The parameters used in the modeling performed for the Environmental Assessment Worksheet under Minn. R. 4410 and for determining emission and operational limits for this facility are listed in Appendix B of this permit. If the Permittee intends to change the parameters used in the modeling, the Permittee must submit the revised parameters to the Commissioner and receive written approval before making any changes. For stack and vent sources, this includes the source emission rate, location, height, diameters, exit velocity, exit temperature, discharge direction, use of rain caps or rain hats, and, if applicable, any emission rate scalars, and 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. R. 7009.0020; Minn. R. 7007.0800, subp. 2
The plume dispersion characteristics due to the parameter revisions must equal or exceed the dispersion characteristics modeled for this permit, and the Permittee shall demonstrate this in the proposal. If the Permittee chooses to re-model, the modeling must only demonstrate compliance with the applicable regulatory thresholds while maintaining at least one significant impact level for future growth.	(continued)

Facility Name: Mountain Timber Wood Products LLC

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For changes that do not involve an increase in an emission rate and that do not require a permit amendment, the proposal must be submitted as soon as practicable, but no less than 60 days before making the change to any parameter. For changes involving increases in emission rates that require a minor permit amendment, the proposal must be submitted as soon as practicable, but no less than 60 days before making the change to any paramenter. For changes involving increases in emission rates that require a permit amendment other than a minor amendment, the proposal must be sumbmitted prior to or with the permit amendment application. This is a state only requirement and is not enforceable by the EPA Administrator and cicizens under the Clean Air Act.	(continued)
RECORDKEEPING	hdr
Recordkeeping: 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. These records shall be kept for a period of five years from the date that the change was made. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the 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

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Mountain Timber Wood Products LLC

Permit Number: 13700326 - 002

Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150-7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 - 7007.1500
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 - 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Mountain Timber Wood Products LLC

Permit Number: 13700326 - 002

Subject Item: **GP 001 Fugitive Sources**

Associated Items: CE 002 Vacuum Sweeping

CE 003 Dust Suppression by Chemical Stabilizers or Wetting Agents

FS 001 Vehicle Traffic

FS 002 Roundwood Storage Yard and Handling

FS 003 Chip Storage Pile and Handling

FS 004 Sawdust Storage Pile and Handling

FS 005 Debarker

FS 006 Chipper

FS 007 Wood Fuel Handling

What to do	Why to do it
OPERATIONAL REQUIREMENTS	hdr
All on-site roads shall be paved.	Minn. R. 7009.0200
The sawdust and chip storage yards shall be paved.	Minn. R. 7009.0200
All on-site paved road silt loadings shall not exceed values in the latest modeling and concurrent Standardized Air Modeling (SAM) spreadsheet.	Minn. R. 7009.0200
The sawdust/chip storage yard silt loading shall not exceed 25 grams per square meter.	Minn. R. 7009.0200
The roundwood storage yard silt content shall not exceed 5.7 percent (e.g. class 5 or class 6 or better).	Minn. R. 7009.0200
The roundwood storage yard shall use chemical dust suppression with at least 80% control.	Minn. R. 7009.0200
Paved Haul Roads Vehicle Traffic Emissions: The Permittee shall vacuum sweep all paved roads within the property boundary, including those not used for hauling. All roads shall be swept once per day. A quarter-inch of precipitation, or greater, may substitute for one sweeping.	Minn. R. 7007.0800, subp. 2; Minn. R. 7009.0200
Unpaved Haul Roads Roundwood Storage Yard Vehicle Traffic Emissions: The facility shall regularly observe travel routes for the roundwood trucks and loaders in the roundwood storage yard to determine if there is excessive dust or spillage that could become airborne, and if so, the facility shall take steps to control fugitive emissions, including the use of a calcium chloride solution or other chemical dust suppressant.	Minn. R. 7007.0800, subp. 2; Minn. R. 7009.0200
Chemical Dust Suppressant Application Rates: When necessary, and during each of the last two weeks of May, June, July, and August in each calendar year, the chemical dust suppressant shall be applied to the travel routes at a rate of at least 0.17 gallons per square yard. One additional application during the last two weeks of September shall be made if excessive dust is observed during the month of September. The travel routes shall be watered once between each chemical dust suppressant application to reactivate the chemical dust suppressant. If necessary, a second watering shall be performed.	Minn. R. 7007.0800, subp. 2; Minn. R. 7009.0200
Haul Roads Vehicle Traffic Emissions Speed Limits: The Permittee shall post signs to limit vehicle speeds to 10 miles per hour for all travel routes used at the facility.	Minn. R. 7007.0800, subp. 2; Minn. R. 7009.0200
SILT TESTING REQUIREMENTS	hdr
The silt tests shall be conducted in accordance with EPA guidance in Appendix C.1 and Appendix C.2 of AP-42. The Permittee shall keep records of all silt loading/content testing.	Minn. R. 7009.0200
Initial Silt Loading Tests of Paved Haul Roads: The Permittee shall conduct onsite silt loading testing for each paved road segment identified in modeling. The testing shall be conducted within 12 months of facility startup. If the tested silt loading values are found to be greater than those assumed in the modeling, then the road cleaning (vacuum sweeping) frequency shall be revised so that the silt loading factors are low enough to bring the resulting base factors back down to the values assumed in the modeling.	Minn. R. 7009.0200

Facility Name: Mountain Timber Wood Products LLC

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Initial Silt Loading Test of Sawdust/Chip Storage Yard: The Permittee shall conduct onsite silt loading testing in the sawdust/chip storage yard in accordance with a performance test plan approved by the Commissioner. If the tested silt loading values are found to be greater than those assumed in the modeling, then a road cleaning (vacuum sweeping) frequency shall be determined and implemented so that the silt loading factors are low enough to bring the resulting base factors back down to the values assumed in the modeling.	Minn. R. 7009.0200
Initial Silt Content Test of Roundwood Storage Yard: The facility shall conduct onsite silt content testing in the roundwood storage yard in accordance with a performance test plan approved by the Commissioner. If the tested silt content values are found to be greater than those assumed in the modeling, then additional control measures shall be determined and implemented so that the silt loading factors are low enough to bring the resulting base factors back down to the values assumed in the modeling.	Minn. R. 7009.0200
Subsequent Actions to Silt Loading Testing Results for Sawdust/Chip Storage Yard: The initial silt loading test shall be conducted before any Subsequent Actions for the sawdust/chip storage yard. If the tested silt loading values are less than those assumed in the modeling, the Permittee may choose to propose Subsequent Actions within 60 days, including but not limited to higher levels of truck traffic and/or less frequent sweeping/cleaning. All Subsequent Actions must be approved by MPCA prior to implementation. If the tested silt loading values are found to be greater than those assumed in the modeling, the Permittee shall notify the Commissioner within 30 days of the test and propose Subsequent Actions within 60 days of the test, including but not limited to better controls, exposure profiling, mass balances, and/or additional studies. All Subsequent Actions must be approved by MPCA prior to implementation.	Minn. R. 7009.0200
Subsequent Actions to Silt Content Testing Results for the Roundwood Storage Yard: The initial silt content test shall be conducted before any Subsequent Actions for the roundwood storage yard. If the tested silt content values are less than those assumed in the modeling, the Permittee may, (if they wish,) propose Subsequent Actions within 60 days, (e.g., MPCA-approved remodeling to show compliance under scenarios with higher levels of truck traffic, less frequent sweeping/cleaning, etc.). If the tested silt content values are found to be greater than those assumed in the modeling the Permittee shall notify the Commissioner within 30 days of the test and propose subsequent actions within 60 days of the test, (e.g., better controls or better quantification methods, such as exposure profiling, mass balances, studies, etc., to be approved by MPCA.	Minn. R. 7009.0200
PM10 Re-modeling is required if: - Silt loading testing or silt content testing indicates values greater than those assumed in the March 3, 2008 submittal. - The facility can not meet any other modeling-based permit conditions.	Minn. R. 7009.0200
RECORDKEEPING REQUIREMENTS	hdr
Recordkeeping: The Permittee shall keep the following records: - Date and extent of each sweeping, with certification from the operator; - Notes of any areas of high loading or spills; - Records of equipment breakdowns and repairs; - Records of precipitation; - Records of observation for excessive dust or spillage and any corrective actions taken; - Dates of application of the chemical dust suppressant, with certification from the operator; - Rate of application of chemical dust suppressant; and - Dates of application of water to maintain the chemical dust suppressant.	Minn. R. 7007.0800, subps. 4 & 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Mountain Timber Wood Products LLC

Permit Number: 13700326 - 002

Subject Item: **SV 002 Baghouse Dust Collector Stack**

Associated Items: EU 002 Hammermill

EU 003 Meal Storage

EU 004 Pellet Mills

EU 005 Pellet Cooler Cyclone Collector

What to do	Why to do it
EMISSION LIMITS	hdr
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Particulate Matter < 10 micron: less than or equal to 1.39 lbs/hour using 24-hour Block Average	Minn. R. 7009.0200
The Permittee shall operate and maintain the process equipment such that emissions of Total Particulate Matter: less than or equal to 0.010 grains/dry standard cubic foot	Title I Condition: To avoid major source classification under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.3000; Minn. R. 7009.0200
The Permittee shall operate and maintain the process equipment such that emissions of Particulate Matter < 10 micron: less than or equal to 0.010 grains/dry standard cubic foot	Title I Condition: To avoid major source classification under 40 CFR Sections 52.21 and 70.2; Minn. R. 7007.3000; Minn. R. 7009.0200
OPERATIONAL REQUIREMENTS	hdr
Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 3.0 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 new range shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The range is final upon issuance of a permit amendment incorporating the change. The Permittee shall record the pressure drop at least once every calendar day when in operation.	Minn. R. 7007.0800, subps. 2 & 14; Minn. R. 7007.3000; Minn. R. 7017.2025, subp. 3
The baghouse stack (SV 002) height shall be at least 50.0 feet above grade.	Minn. R. 7009.0200
COMPLIANCE & RECORDKEEPING	hdr
Recordkeeping of Pressure Drop: The Permittee shall record the time and date of each pressure drop reading and whether or not the recorded pressure drop was within the range specified in this permit.	Minn. R. 7007.0800, subps. 4 & 5; Minn. R. 7007.3000
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - Visible emissions are observed; - The opacity exceeds the excursion range; - 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, return the opacity to below the excursion 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 the fabric filter.	Minn. R. 7007.0800, subps. 4, 5 & 14
Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturer, the Permittee shall inspect the control equipment components that are subject to wear or plugging, including but not limited to the bearings, belts, hoses, fans, nozzles, orifices, and ducts. The Permittee shall maintain a written record of these inspections and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subps. 4, 5 & 14
Annual Inspections: At least once per calendar quarter, or more frequently as required by the manufacturer, the Permittee shall inspect the control equipment components not covered by the quarterly inspections. This includes, but is not limited to, components that are not subject to wear or plugging including structural components, housings, and hoods. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subps. 4, 5 & 14
PERFORMANCE TESTING REQUIREMENTS	hdr

Facility Name: Mountain Timber Wood Products LLC

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Initial Performance Test: due 180 days after Initial Startup to measure emissions of Total Particulate Matter, Particulate Matter less than 10 microns, and Opacity.	Minn. R. 7007.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Mountain Timber Wood Products LLC

Permit Number: 13700326 - 002

Subject Item: **EU 001 Process Drying / Cyclone Collectors**

Associated Items: SV 001 Process Drying Stack

What to do	Why to do it
EMISSION LIMITS	hdr
Opacity: less than or equal to 20 percent opacity (6 minute average), except for one 6-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20 percent or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent.	Minn. R. 7011.0110; Minn. R. 7011.0610, subp. 1(A)(2)
Particulate Matter < 10 micron: less than or equal to 4.77 lbs/hour using 24-hour Block Average	Minn. R. 7009.0200
Operate and maintain the process equipment such that emissions of Particulate Matter < 10 micron: less than or equal to 0.015 grains/dry standard cubic foot	Minn. R. 7009.0200
Operate and maintain the process equipment such that emissions of Total Particulate Matter: less than or equal to 0.015 grains/dry standard cubic foot	Minn. R. 7009.0200
Volatile Organic Compounds: less than or equal to 80 tons/year using 365-day Rolling Sum	Title I Condition: To avoid major source classification under 40 CFR Section 70.2
OPERATIONAL REQUIREMENTS	hdr
The Process Drying stack (SV 001) height shall be at least 70.0 feet above grade.	Minn. R. 7009.0200
Fuel use limited to untreated wood. Untreated wood is defined as any wood that has not been subject to any chemical treatment or coating.	Minn. R. 7007.0800, subp. 2
RECORDKEEPING	hdr
Recordkeeping: Emission factors from the most recent MPCA approved performance test shall be used to calculate emissions for EU 001. Emission factors from AP-42, Chapter 10.6.2 for SCC 3-07-006-26 may be used prior to the completion and approval of the initial performance test. If the Permittee wants to use a different emission factor for compliance, it needs to be approved by the Commissioner before the emission factor can be used.	Title I Condition: To avoid classification as a major source or modification under 40 CFR Sections 52.21 and 63.2; to avoid major source classification under 40 CFR Section 70.2; Minn. R. 7007.3000
Maintain weekly records of the total amount of wood processed. By the last day of each month, record the total amount of wood processed (oven-dried tons) in EU 001 for the previous month and calculate and record the total sum of wood processed for the previous 12-month period.	Title I Condition: To avoid classification as a major source or modification under 40 CFR Sections 52.21 and 63.2; to avoid major source classification under 40 CFR Section 70.2; Minn. R. 7007.3000
PERFORMANCE TESTING	hdr
Initial Performance Test: due 180 days after Initial Startup to measure emissions of Total Particulate Matter, Particulate Matter less than 10 micron, and Opacity.	Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 180 days after Initial Startup to measure and determine emission factors for VOCs.	Title I Condition: To avoid major source classification under 40 CFR Section 70.2; Minn. R. 7017.2020, subp. 1

TABLE B: SUBMITTALS

Facility Name: Mountain Timber Wood Products LLC

Permit Number: 13700326 - 002

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

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.

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

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

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.

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

Facility Name: Mountain Timber Wood Products LLC

Permit Number: 13700326 - 002

What to send	When to send	Portion of Facility Affected
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup of the facility.	EU001, SV002, Total Facility
Notification of the Date Construction Began	due 30 days after Start Of Construction	Total Facility
Testing Frequency Plan	due 60 days after Initial Performance Test for PM, PM10 and Opacity emissions. 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.	EU001, SV002
Testing Frequency Plan	due 60 days after Initial Performance Test for VOC emissions. 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.	EU001

TABLE B: RECURRENT SUBMITTALS

Facility Name: Mountain Timber Wood Products LLC

Permit Number: 13700326 - 002

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance. 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
Annual Report	due 30 days after end of each calendar year starting 01/01/2008. The Permittee shall submit an annual report by January 30th of each year that describes the changes made at the facility during the previous calendar year using the latest MPCA application forms (GI-04 and GI-05 Series). The report shall include the percent by cord of the amount of softwood processed, the total amount of wood processed, and the total throughput in oven-dried tons based on a 12-month rolling sum. In addition, the report shall include the emission unit, stack/vent, group, and control equipment data for any new or replaced units or control devices. The report shall be submitted with the annual Compliance Certification listed in Table B. As part of the Annual Report, the Permittee shall verify and certify that the facility has maintained minor source status for New Source Review and Title V Permit Program.	Total Facility
Compliance Certification	due 31 days after end of each calendar year following Permit Issuance (for the previous calendar year). The Permittee shall submit this to the Commissioner on a form approved by the Commissioner. This report covers all deviations experienced during the calendar year.	Total Facility
Equipment List	due 91 days after end of each calendar year following Initial Startup. If there are no changes to the facility, the Permittee shall submit the list stating that no changes were made to the facility.	Total Facility

APPENDIX A
Insignificant Activities and Applicable Requirements
Facility Name: Mountain Timber Wood Products LLC
Permit Number: 13700326-002

Under Minn. R. 7007.1250, subp. 1(A), the Permittee may add insignificant activities to the stationary source throughout the term of the permit without getting permit amendments. Certain exclusions apply and are listed in Minn. R. 7007.1250, subp. 2.

The following sources at the Permittee's facility qualify as insignificant activities under Minn. R. 7007.1300, subps. 3 and 4 and are not required to be listed in the permit.

Minn. R. 7007.1300, subp.	Rule Description of the Activity	General Applicable Requirement
3(I)	2 Infeed Conveyors Burner Ash Handling	Minn. R. 7011.0715 and Minn. R. 7011.0610 (PM opacity)

APPENDIX B
Parameters Used in Modeling
Facility Name: Mountain Timber Wood Products LLC
Permit Number: 13700326-002

Modeling Parameters Used for:
Mountain Timber Wood Products, Mt. Iron, St. Louis County, Minnesota

Hardcopy Report Submittals
Revised AERMOD Ambient Air Quality Analysis, Mountain Timber Wood Products, Mt. Iron, MN (March 3, 2008).

Electronic Submittals (eg compact disk or email attachments)
Compact disk titled "AERMOD Ambient Air Quality, Mountain Timber Wood Products, Mt. Iron, Minnesota, Wenck File #1836-06, March 2008".

Full Details
See electronic submittals for full data details.

Summary Report (this is a computer-generated "REPORT" with simple headers, simple sources, and selected parameters)
The summary report is for simple (constant) emission rates and corresponding stack/source parameters. It does not fully document details regarding model control options, emission rates with varying emission scalars, corresponding stack/source parameters, wind speed categories for wind erosion, building profile input program (BPIP) outputs, various output selections (e.g., EVENTFIL, MULTYEAR, PLOTFILE, POSTFILE, MAXIFILE), applicable "INCLUDED" file information, receptor grids, or other special features described in the following EPA modeling user guide:

AERMOD (version 07026): http://www.epa.gov/scram001/dispersion_prefrec.htm#aermod

Note: If any difference exists between summary values in this appendix vs. the hardcopy report vs. the electronic submittal modeled values, the electronic submittal modeled values prevail.

For Your Information
PM10 modeling was conducted for EAW (cumulative potential effects) purposes: ambient standards and PSD increment consumption.

The entire facility consumes increment because it is a new facility.

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*** AERMOD - VERSION 07026 ***    ***  1836-06: Mountain Timber Wood Products; PM10 Increment              ***        02/28/08
                                  ***  Modeling Itr 5; Hibbing/International Falls, MN 1972                ***        17:14:28
U:\PROJECTS\DBECKER\PROJECTS\MTWMAR08\MAR_03RD\MT05in72.aml
**This Run Includes:   213 Source(s);      7 Source Group(s); and     568 Receptor(s)
    AREA SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) XDIM(M) YDIM(M)
  VOLUME SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  SYI(M)  SZI(M)
AREACIRC SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) RADIUS  #VERTS.
AREAPOLY SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT) #VERTS.  SZI(M)
   POINT SRCIDNT EASTINGNORTHING ELEV(M)   G/SEC  #/HOUR  T/YEAR  HGT(M) HGT(FT)  DIA(M) DIA(FT)  DEG(K)  DEG(C)  DEG(F) VS(M/S) VS(F/M)    ACFM
 ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- ------- -------
  POINT MTWSV001  528329 5263620     445    0.60    4.77   20.89   21.34   70.01   1.520   4.987    355.     82.    180.   15.52 3055.12   59673
  POINT MTWSV002  528332 5263581     445    0.17    1.39    6.08   15.24   50.00   0.760   2.493    339.     66.    150.   25.87 5092.52   24867
 VOLUME MTWFS001  528369 5263564     445    0.00    0.00    0.00    2.59    8.50   4.650   2.410
 VOLUME MTWFS002  528370 5263554     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS003  528372 5263544     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS004  528373 5263533     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS005  528377 5263524     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS006  528382 5263516     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS007  528387 5263507     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS008  528397 5263507     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS009  528407 5263507     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS010  528417 5263507     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS011  528427 5263507     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS012  528437 5263507     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS013  528447 5263507     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS014  528454 5263500     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS015  528461 5263492     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS016  528467 5263484     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS017  528475 5263479     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS018  528484 5263474     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS019  528493 5263471     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS020  528503 5263470     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS021  528513 5263470     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS022  528523 5263469     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS023  528533 5263468     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS024  528543 5263468     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS025  528553 5263468     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS026  528563 5263466     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS027  528573 5263463     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS028  528583 5263462     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS029  528592 5263458     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS030  528600 5263452     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS031  528610 5263449     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS032  528614 5263440     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS033  528621 5263432     445    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS034  528627 5263424     444    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS035  528629 5263414     444    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS036  528630 5263404     444    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS037  528631 5263394     444    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS038  528629 5263385     445    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS039  528627 5263375     445    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS040  528624 5263365     445    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS041  528622 5263355     445    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS042  528620 5263345     445    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS043  528620 5263335     445    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS044  528620 5263325     445    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS045  528622 5263316     445    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS046  528622 5263305     445    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS047  528628 5263297     445    0.00    0.00    0.01    2.59    8.50   4.650   2.410
 VOLUME MTWFS048  528635 5263290     445    0.00    0.00    0.02    2.59    8.50   4.650   2.410
 VOLUME MTWFS049  528642 5263283     445    0.00    0.01    0.03    2.59    8.50   4.650   2.410
 VOLUME MTWFS050  528648 5263275     445    0.00    0.01    0.04    2.59    8.50   4.650   2.410
 VOLUME MTWFS051  528654 5263267     444    0.00    0.01    0.03    2.59    8.50   4.650   2.410
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VOLUME	MTWFS052	528660	5263259	443	0.00	0.00	0.01	2.59	8.50	4.650	2.410
VOLUME	MTWFS053	528667	5263252	442	0.00	0.01	0.03	2.59	8.50	4.650	2.410
VOLUME	MTWFS054	528675	5263245	441	0.00	0.01	0.04	2.59	8.50	4.650	2.410
VOLUME	MTWFS055	528682	5263238	440	0.00	0.01	0.04	2.59	8.50	4.650	2.410
VOLUME	MTWFS056	528690	5263232	440	0.00	0.01	0.04	2.59	8.50	4.650	2.410
VOLUME	MTWFS057	528699	5263227	439	0.00	0.01	0.04	2.59	8.50	4.650	2.410
VOLUME	MTWFS058	528708	5263223	438	0.00	0.01	0.04	2.59	8.50	4.650	2.410
VOLUME	MTWFS059	528718	5263221	437	0.00	0.01	0.04	2.59	8.50	4.650	2.410
VOLUME	MTWFS060	528728	5263219	436	0.00	0.01	0.04	2.59	8.50	4.650	2.410
VOLUME	MTWFS061	528738	5263218	436	0.00	0.01	0.04	2.59	8.50	4.650	2.410
VOLUME	MTWFS062	528748	5263217	436	0.00	0.01	0.04	2.59	8.50	4.650	2.410
VOLUME	MTWFS063	528758	5263215	436	0.00	0.01	0.04	2.59	8.50	4.650	2.410
VOLUME	MTWFS064	528768	5263214	436	0.00	0.01	0.03	2.59	8.50	4.650	2.410
VOLUME	MTWFS065	528625	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS066	528615	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS067	528605	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS068	528595	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS069	528585	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS070	528575	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS071	528565	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS072	528555	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS073	528545	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS074	528535	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS075	528525	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS076	528515	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS077	528505	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS078	528495	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS079	528485	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS080	528475	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS081	528465	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS082	528455	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS083	528445	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS084	528435	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
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VOLUME	MTWFS087	528405	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS088	528395	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS089	528385	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS090	528375	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS091	528365	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS092	528355	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS093	528345	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS094	528335	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS095	528325	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS096	528315	5263290	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS097	528315	5263300	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410
VOLUME	MTWFS098	528315	5263310	445	0.00	0.01	0.03	2.59	8.50	4.650	2.410
VOLUME	MTWFS099	528315	5263320	445	0.00	0.01	0.03	2.59	8.50	4.650	2.410
VOLUME	MTWFS100	528315	5263330	445	0.00	0.01	0.05	2.59	8.50	4.650	2.410
VOLUME	MTWFS101	528315	5263340	445	0.00	0.01	0.05	2.59	8.50	4.650	2.410
VOLUME	MTWFS102	528315	5263350	445	0.00	0.01	0.05	2.59	8.50	4.650	2.410
VOLUME	MTWFS103	528315	5263360	445	0.00	0.01	0.05	2.59	8.50	4.650	2.410
VOLUME	MTWFS104	528315	5263370	445	0.00	0.01	0.03	2.59	8.50	4.650	2.410
VOLUME	MTWFS105	528315	5263380	445	0.00	0.01	0.03	2.59	8.50	4.650	2.410
VOLUME	MTWFS106	528325	5263380	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410
VOLUME	MTWFS107	528335	5263380	445	0.00	0.00	0.02	2.59	8.50	4.650	2.410
VOLUME	MTWFS108	528345	5263380	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410
VOLUME	MTWFS109	528355	5263380	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410
VOLUME	MTWFS110	528355	5263390	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410
VOLUME	MTWFS111	528355	5263400	445	0.00	0.00	0.02	2.59	8.50	4.650	2.410
VOLUME	MTWFS112	528355	5263410	445	0.00	0.00	0.02	2.59	8.50	4.650	2.410
VOLUME	MTWFS113	528355	5263420	445	0.00	0.00	0.02	2.59	8.50	4.650	2.410
VOLUME	MTWFS114	528355	5263430	445	0.00	0.00	0.02	2.59	8.50	4.650	2.410

VOLUME	MTWFS115	528355	5263440	445	0.00	0.00	0.02	2.59	8.50	4.650	2.410	
VOLUME	MTWFS116	528355	5263450	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410	
VOLUME	MTWFS117	528355	5263460	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410	
VOLUME	MTWFS118	528365	5263460	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410	
VOLUME	MTWFS119	528375	5263460	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410	
VOLUME	MTWFS120	528385	5263460	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410	
VOLUME	MTWFS121	528395	5263460	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410	
VOLUME	MTWFS122	528405	5263460	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410	
VOLUME	MTWFS123	528415	5263460	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410	
VOLUME	MTWFS124	528425	5263460	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410	
VOLUME	MTWFS125	528435	5263460	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410	
VOLUME	MTWFS126	528445	5263460	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410	
VOLUME	MTWFS127	528455	5263460	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS128	528465	5263460	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS129	528475	5263460	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS130	528485	5263460	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS131	528495	5263460	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS132	528505	5263460	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS133	528515	5263460	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS134	528525	5263460	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS135	528535	5263460	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS136	528545	5263460	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS137	528555	5263460	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS138	528565	5263460	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS139	528575	5263460	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS140	528585	5263460	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS141	528597	5263450	445	0.00	0.00	0.00	2.59	8.50	4.650	2.410	
VOLUME	MTWFS142	528355	5263470	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410	
VOLUME	MTWFS143	528355	5263480	445	0.00	0.00	0.02	2.59	8.50	4.650	2.410	
VOLUME	MTWFS144	528355	5263490	445	0.00	0.01	0.03	2.59	8.50	4.650	2.410	
VOLUME	MTWFS145	528355	5263500	445	0.00	0.01	0.03	2.59	8.50	4.650	2.410	
VOLUME	MTWFS146	528355	5263510	445	0.00	0.01	0.03	2.59	8.50	4.650	2.410	
VOLUME	MTWFS147	528354	5263520	445	0.00	0.01	0.03	2.59	8.50	4.650	2.410	
VOLUME	MTWFS148	528353	5263530	445	0.00	0.01	0.03	2.59	8.50	4.650	2.410	
VOLUME	MTWFS149	528352	5263540	445	0.00	0.00	0.02	2.59	8.50	4.650	2.410	
VOLUME	MTWFS150	528351	5263550	445	0.00	0.00	0.01	2.59	8.50	4.650	2.410	
VOLUME	MTWFS151	528423	5263693	444	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS152	528425	5263683	445	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS153	528427	5263673	444	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS154	528428	5263663	444	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS155	528419	5263661	444	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS156	528409	5263659	444	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS157	528399	5263658	444	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS158	528389	5263658	444	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS159	528379	5263657	444	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS160	528369	5263657	444	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS161	528359	5263656	445	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS162	528349	5263654	445	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS163	528339	5263652	445	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS164	528329	5263652	445	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS165	528319	5263652	445	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWFS166	528309	5263652	445	0.00	0.00	0.00	1.47	4.82	4.650	1.370	
VOLUME	MTWRWY1	528400	5263375	445	0.01	0.08	0.34	2.59	8.50	35.440	2.410	
VOLUME	MTWRWY2	528552	5263375	445	0.01	0.08	0.37	2.59	8.50	35.440	2.410	
VOLUME	MTWSDC1	528313	5263472	445	0.00	0.03	0.14	2.59	8.50	15.850	2.410	
VOLUME	MTWSDC2	528313	5263404	445	0.00	0.04	0.17	2.59	8.50	15.850	2.410	
VOLUME	MTWSCW1	528313	5263472	445	0.01	0.05	0.23	2.59	8.50	15.850	2.410	*WSPEED*
VOLUME	MTWSCW2	528313	5263404	445	0.01	0.05	0.23	2.59	8.50	15.850	2.410	*WSPEED*
TOTAL					0.88	6.97	30.52					
SUMP=					0.78	6.16	26.97					
SUMV=					0.10	0.81	3.55					

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 13700326-001

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:

Applicant/Address	Stationary Source/Address (SIC Code: **2499**)
PO Box 354 Mountain Iron St. Louis County	8877 Slate Street Mountain Iron St. Louis County
Contact: Ms. Joann Birchem	Phone: 218-735-8600

1.2 Description of the Facility

Mountain Timber Wood Products, LLC is planning to construct a new, wood pelletizing facility in Mountain Iron, Minnesota. A mixture of hardwood and softwood will be cleaned, processed into small pieces, dried into pellets, cooled and packaged.

Process drying will emit particulate matter (PM), particulate matter less than 10 microns in diameter (PM_{10}), sulfur dioxide (SO_2), oxides of nitrogen (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), lead and 12 hazardous air pollutants (HAPs) including acetaldehyde, acrolein, benzene, formaldehyde, methanol, methylene chloride, m,p-xylene, o-xylene, phenol, propionaldehyde, styrene, and toluene. The hammermill, meal storage, pellet mills and pellet cooler will emit PM and PM_{10}. The remaining fugitive sources will also emit PM and PM_{10}. The fugitive sources include vehicle traffic, roundwood storage yard and handling, chip storage pile and handling, sawdust storage pile and handling, debarker, chipper and wood fuel handling.

The process drying system includes a multiclone system that recovers product. The multiclone system is not considered control equipment. The hammermill, meal storage, pellet mills and pellet cooler are all controlled by a baghouse.

The facility is limited to a maximum of 60 percent by cord softwood and a minimum of 40 percent by cord softwood as a calendar monthly average. The remainder of wood processed shall be hardwood. Weekly records of type of wood processed and total amount of wood processed will be compiled to determine the monthly total and average composition. In addition, total facility maximum capacity is 125,000 oven-dried tons (ODT) per year, but the facility is limited to a maximum production total of 100,000 ODT/yr to avoid classification as a major source under 40 CFR§ 70.2.

1.3 Description of this Permit Action

This permit allows for the construction of a new wood-pelletizing facility in Mountain Iron, Minnesota. The facility requested a state permit and has taken limits to avoid major source status under Part 70.

1.4 Facility Emissions:

Table 1. Total Facility Potential to Emit Summary (tpy)

	PM	PM_{10}	SO_2	NO_x	CO	VOC	Single HAP	All HAPs
Total Facility Potential Emissions	42.2	30.5	6.02	87.5	48.1	100.0	6.0	16.26
Total Facility Limited Potential Emissions (100,000 ODT/year)	42.2	30.5	6.02	70.0	38.5	80.0	4.8	13.01

Table 2. Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD			PM, PM_{10}, SO_2, NO_x, VOC and CO
Part 70 Permit Program		PM, PM_{10}, VOC	SO_2, NO_x, CO, HAPs
Part 63 NESHAP			HAPs

2. Regulatory and/or Statutory Basis

New Source Review

Mountain Timber Wood Products, LLC is a new, non-major source under New Source Review regulations.

Part 70 Permit Program

This facility is a non-major source under the Part 70 permit program.

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)

This facility is a non-major source under 40 CFR pt. 63. Thus, no NESHAPs apply.

Minnesota State Rules

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

- Minn. R. 7011.0610 Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment
- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment

Table 3. Regulatory Overview of Facility

Unit	Applicable Regulations	Comments:
Total Facility	Title I limit to avoid classification as a major source under 40 CFR 70.2	Wood type processed at the facility shall be limited to a maximum of 60%, minimum of 40% by cord softwood as a fiscal monthly average with the remainder of wood processed as hardwood, to meet VOC limit.
EU 001	Title I limit to avoid classification as a major source under 40 CFR 70.2	Total facility throughput is restricted to 100,000 oven-dried tons per year based on a 12-month rolling sum to keep VOC, PM and PM_{10} emissions below thresholds defined in 40 CFR 70.2. Maximum capacity is 125,000 oven-dried tons per year. Emissions calculated using AP-42 Ch. 10.6.2 for SCC 3-07-006-26. Throughput will be measured by a truck scale for outgoing product.
	Minn. R. 7011.0610	Standards of Performance for Direct Heating Equipment: Limits opacity to 20% with exceptions PM/PM_{10} limits are less stringent than the limit on the cyclone collectors.
SV 002	Title I limit to avoid classification as a major source under 40 CFR 70.2	Total PM limit of 0.010 gr/dscf set to keep emissions below thresholds defined in 40 CFR 70.2. PM_{10} limit of 0.010 gr/dscf set to keep emissions below thresholds defined in 40 CFR 70.2.
	Minn. R. 7011.0715	Standards of Performance for Pre-1969 Industrial Process Equipment: Limits opacity to 20%. PM/PM_{10} limits are less stringent than the limit on the baghouse.

3. Technical Information

3.1 Calculations of Potential to Emit

- Potential PM, PM10, NOx, CO, VOC, and HAPs for process drying (EU 001) were calculated using AP-42 emission factors (Chapter 10.6.2 Particleboard Manufacturing) for SCC 3-07-006-26. Potential emissions are based on a maximum capacity of 125,000 ODT per year and the limited potential emissions are based on 100,000 ODT per year.
- Potential emissions of sulfur oxides and lead for process drying (EU 001) were calculated using the AP-42 emission factors from chapter 1.6 for wood residue combustion in boilers. These emissions were calculated based on the heat input for the drying system of 55 MMBtu/hr.
- Mountain Timber requested with manufacturer information support a limit for the drying process of 0.015 gr/dscf (20.9 tpy). This limit was relied on to pass the modeling.
- Potential emissions for SV 002, the baghouse dust collector controlling EU 002 Hammermill, EU 003 Meal Storage, EU 004 Pellet Mills, and EU 005 Pellet Cooler Cyclone Collector, were based on a grain loading of 0.010 gr/dscf and a flow rate of 16,230 dscfm. The baghouse is guaranteed by the manufacturer to meet the 0.010 gr/dscf limit.
- Fugitive source parameters and emissions were determined as part of the modeling.

Attachment 1 to this TSD contains Form GI-07, which summarizes the PTE of the Facility, while Attachment 2 contains detailed spreadsheets and supporting information prepared by the MPCA and the Permittee. Attachment 3 shows the manufacturer information for the baghouse.

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.

Table 4 summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

Table 4. Periodic Monitoring

EU/GP/SV	Requirement (basis)	Additional Monitoring	Discussion
Total Facility	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR 70.2	Recordkeeping: Weekly records of type of wood processed	Facility will maintain weekly records of the type of wood processed including percent by cord of the amount of softwood processed as well as total amount of wood processed. Records will be compiled to determine monthly total and average consumption as a calendar monthly average.
EU 001	Title I Condition: To limit potential to emit to less than major source levels as defined by 40 CFR 70.2	Recordkeeping	Throughput limited to 100,000 ODT per year based on a 12-month rolling sum. Facility will maintain weekly records of the throughput for the process dryer. Throughput will be measured by a truck scale for outgoing product. By the last day of each month, the facility shall record the total amount of wood processed (ODT) for the previous month and calculate and record the amount processed for the previous 12-month period.
		Initial Stack Testing	To show compliance with the lb/hr and gr/dscf PM/PM_{10} emission limits and the opacity limit. Testing frequency plan required to determine schedule of future tests.
SV002	Minn. R. 7011.0715, Opacity ≤ 20%	Daily recordkeeping of pressure drop.	Daily observation and records of pressure drop to demonstrate compliance with opacity limit. Corrective actions if visible emissions are observed.
	Title I Condition: Limit taken to avoid classification as a major source and under 40 CFR 70.2	Initial stack testing, O&M plan, control equipment monitoring including: daily pressure drop reading and visible emission checks	Initial stack testing shall be performed to demonstrate compliance with the 0.01 grains per dry standard cubic foot limit. Installation of a fabric filter should adequately control PM to below the emission limit.

3.3 Insignificant Activities

Mountain Timber has two operations which are classified as insignificant activities. These include two infeed conveyors and burner ash handling.

The permit is required to include periodic monitoring for all emissions units, including insignificant activities, per EPA guidance. The insignificant activities at this Facility are only subject to general applicable requirements. Using the criteria outlined earlier in this TSD, the following table documents the justification why no additional periodic monitoring is necessary for the current insignificant activities. See Attachment 1 of this TSD for PTE information for the insignificant activities.

Table 5. Insignificant Activities

Insignificant Activity	General Applicable Emission limit	Discussion
2 Infeed Conveyors	PM, variable depending on airflow Opacity ≤ 20% (Minn. R. 7011.0715)	For these conveyors, it is highly unlikely that they could violate the applicable requirement. They are fugitive sources of emissions and the potential emission calculation conservatively assumes that material is present on the infeed conveyor at all times. All conveyor transfer points are enclosed. In addition, testing for PM is not feasible.
Burner Ash Handling	PM, variable depending on airflow Opacity ≤ 20% (with exceptions) (Minn. R. 7011.0715 and Minn. R. 7011.0610)	Actual ash production estimated at 40 tons per month (480 tons/year). Total ash calculated using 55 MMBtu/hr, 5250 Btu/lb and 1% ash. Emission factors from AP-42 Ch. 11.12 for Concrete Batching, truck loading. Potential uncontrolled emissions for burner ash handling are below Minn. R. 7007.1300 Subp. 3(I) threshold of 1 tpy. In order for emissions to be greater than 1 tpy, the facility would have to produce and handle over 2000 tons per year of ash. It is highly unlikely that Mountain Timber would produce over four times the ash estimated so it is highly unlikely they would be able to violate the applicable requirement. In addition, the ash will be loaded inside a building so monitoring of visible emissions is not necessary.

3.4 Permit Organization

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements.

3.5 Comments Received

Public Notice Period: March 21, 2008 – April 21, 2008
EPA 30-day Review Period: March 21, 2008 – April 21, 2008

Comments were received from the public in response to the EAW for this project, these can be found in the files with the EAW. These comments did not specifically address or lead to any changes in the permit.

The MPCA citizens board met on July 22, 2008 and denied the requests for an EIS for this project.

4. Conclusion

Based on the information provided by Mountain Timber Wood Products, LLC, the MPCA has reasonable assurance that the operation of the emission facility, as described in the Air Emission Permit No. 13700326-002, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Trevor Shearen (permit writer/engineer)
Sara L. Kelley (MPCA contractor/permit writer)
Jim Sullivan (EAW)
Dennis Becker (modeling)
Steve Palzkill (enforcement)
Andy Place (stack testing)
Bruce Braaten (peer reviewer)

AQ File No. 4322; DQ 1389

Attachments:
1. Emission Calculations (in Delta)
2. Facility Description and CD-01 Forms (in Delta)