

**AIR EMISSION PERMIT NO. 06100010- 001
IS ISSUED TO**

Potlatch Corporation

Potlatch - Grand Rapids
502 County Rd 63
Grand Rapids, Itasca County, Minnesota 55744

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	Date
Total Facility PSD Permit 06100010-003	Issued: February 25, 1995
Major Amendment Permit	Issued: November 28, 2000
Total Facility Operating Permit (Title V)	Application Received: April 13, 1995 (supplemented August 2001)

This permit authorizes the permittee to operate 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. This permit incorporates all previously issued air emission permits, including number 06100010-003.

Permit Type: Federal ; Part 70

Issue Date: December 3, 2001

Expiration: December 3, 2006

All Title I Conditions do not expire.

Carolina Schutt

Ann M. Foss

Major Facilities Section Manager

Majors Air and Remediation Division

For Karen A. Studders

Commissioner

Minnesota Pollution Control Agency

TABLE OF CONTENTS

Notice to the Permittee

Permit Shield

Facility Description

Table A: Limits and Other Requirements

Table B: Submittals

Appendix A – *(not used in this permit)*

Appendix B – VOC Emission Calculation for EU007

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. If certain requirements have been determined not to apply they are listed in Table A of this permit.

FACILITY DESCRIPTION:

Potlatch Corporation, Minnesota Wood Products Division, owns and operates an oriented strand board (OSB) manufacturing facility located just west of Grand Rapids on County Road 63 in Itasca County, Minnesota. OSB is a wood panel product widely used in the building industry. The plant is located on an approximately 222 acre site.

An air emission permit was issued in September 1979 for construction of a new plant, which replaced the original plant owned and operated by Blandin Corporation. Potlatch purchased the plant from Blandin Corporation in 1990. This plant was issued a total facility air quality permit under the federal Prevention of Significant Deterioration (PSD) regulations in February, 1995.

This permit (Air Emission Permit No. 06100010-001), is for the total facility and supersedes all other previously issued air emission permits.

The air emission units at this facility include four rotary wood wafer dryers, two thermal oil heaters, one board press, and seven wood waste handling operations. The rotary wood wafer dryers are controlled by simple cyclones, wet electrostatic precipitators, and thermal oxidizers. Wood waste handling operations are controlled by fabric filters.

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

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
<p>Parameters Used in Modeling: The Permittee must submit to the Commissioner for approval any revisions of the parameters (stack heights, emission rates, and other parameters) used in the PSD modeling for Permit No. 06100010-003 and must wait for a written approval before making such changes. The information submitted must include, at a minimum, the locations, heights and diameters of the stacks, locations and dimensions of nearby buildings, the velocity and temperatures of the gases emitted, and the emission rates. The plume dispersion characteristics due to the revisions of the information must be equivalent to or better than the dispersion characteristics modeled previously. 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 remodel.</p>	<p>Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000</p>
<p>For changes that do not involve an increase in an emission rate and that do not require a permit amendment, this proposal must be submitted as soon as practicable, but no less than 60 days before beginning actual construction of the stack or associated emission unit.</p> <p>For changes involving increases in emission rates and that require a minor permit amendment, the proposal must be submitted as soon as practicable, but no less than 60 days before beginning actual construction of the stack or associated emission unit.</p> <p>For changes involving increases in emission rates and that require a permit amendment other than a minor amendment, the proposal must be submitted with the permit application.</p>	<p>Title I Condition (continued from above)</p>
<p>Property Line Fencing: the Permittee shall maintain the fencing and gates which have previously been installed to enclose the boundaries of the property. The property shall be enclosed with a continuous fence, excluding access points, and shall have installed gates or a guard at each access point, except as described below. The Permittee shall thereafter keep the gates closed unless authorized persons are entering or leaving the property. Access points such as a railroad shall be posted with "No Trespassing" signs. The Permittee shall inspect the fencing and gates once per year to ensure compliance with access control. The Permittee shall complete all repairs and maintenance to the fencing and gates as soon as possible but no later than 30 days after the Permittee observes the need for repair or maintenance.</p>	<p>Minn. R. 7007.0800, subp. 2</p>
<p>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 shall include a preventative maintenance program for that equipment, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment to proper operation to meet applicable permit conditions, and the records kept to demonstrate plan implementation.</p>	<p>Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)</p>
<p>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.</p>	<p>Minn. R. 7011.0150</p>
<p>Fugitive Dust Control Plan: The Permittee shall follow the actions and record keeping specified in the control plan. Amendments to the plan may be proposed by the Permittee and are subject to review and approval by the Commissioner. The plan shall continue to carry forward the control requirements and preventative measures from Section 6.16 of air emission permit 06100010-003 and shall identify all fugitive emission sources, primary and contingent control measures, and record keeping. If the Commissioner determines the permittee is out of compliance with Minn. R. 7011.0150 or the fugitive emission control plan, then the permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors.</p>	<p>Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0800, subp. 2</p>
<p>Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A and/or B.</p>	<p>Minn. R. ch. 7017</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

<p>The following U.S. EPA reference methods (as amended) shall be used, with any modifications required by an applicable requirement, when conducting performance tests pursuant to this permit, unless an applicable requirement specifies a different method: Method 5, as amended by Minn. R. 7011.0725, for Total Particulate Matter Methods 201A and 202 for PM10 Method 7 or Method 7E for NOx Method 9 for Opacity Method 10 for Carbon Monoxide Method 25 or Method 25A (with optional Methane correction) for VOC</p> <p>A minor change or an alternative or equivalent method may be approved by the Commissioner in accordance with Minn. R. 7017.2050, subp. 2.</p>	<p>Minn. R. 7007.0800, subp. 2; and Minn. R. 7017.2050, subp. 1</p>
<p>Operating and/or production limits may be placed on emission units based on operating conditions during compliance testing. Limits set as a result of a compliance test (conducted before or after permit issuance) apply until new operating/production limits are set following formal review of a compliance test as specified by Minn. R. 7017.2025.</p>	<p>Minn. R. 7017.2025</p>
<p>Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.</p>	<p>Minn. R. 7007.0800, subp. 4(D)</p>
<p>Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment as described in the Operation and Maintenance Plan.</p>	<p>Minn. R. 7007.0800, subp. 4(D)</p>
<p>Operation of Monitoring Equipment: Unless otherwise noted in Tables A and/or B, 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.</p>	<p>Minn. R. 7007.0800, subp. 4(D)</p>
<p>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.</p>	<p>Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)</p>
<p>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.</p>	<p>Minn. R. 7011.0020</p>
<p>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.</p> <p>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.</p>	<p>Minn. R. 7019.1000, subp. 3</p>
<p>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.</p> <p>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.</p>	<p>Minn. R. 7019.1000, subp. 2</p>
<p>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, as defined in Minn. R. 7007.0100, subp. 8a, from permit conditions which could endanger human health or the environment.</p>	<p>Minn. R. 7019.1000, subp. 1</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

<p>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:</p> <ol style="list-style-type: none"> 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. 	<p>Minn. R. 7019.1000, subp. 1</p>
<p>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.</p>	<p>Minn. R. 7019.1000, subp. 4</p>
<p>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.</p>	<p>Minn. R. 7007.1150 through Minn. R. 7007.1500</p>
<p>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).</p>	<p>Minn. R. 7007.1400, subp. 1(H)</p>
<p>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.</p>	<p>Minn. R. 7007. 0800, subp. 5(B)</p>
<p>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).</p>	<p>Minn. R. 7007.0800, subp. 5(C)</p>
<p>Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080. This is a state only requirement and is not federally enforceable or enforceable by citizens under the Clean Air Act.</p>	<p>Minn. R. 7030.0010 - 7030.0080</p>
<p>The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.</p>	<p>Minn. R. 7007.0800, subp. 16</p>
<p>Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).</p>	<p>Minn. R. 7007.0800, subp. 9(A)</p>
<p>Emission Fees: due 60 days after receipt of an MPCA bill.</p>	<p>Minn. R. 7002.0005 through Minn. R. 7002.0095</p>
<p>The Permittee may be required to submit a Risk Management Plan (RMP) under the federal rule, 40 CFR pt. 68. Each owner or operator of a stationary source, at which a regulated substance is present above a threshold quantity in a process, shall design and implement an accidental release prevention program. The RMPs must be submitted to a centralized location as specified by US EPA. RMP submittal information may be obtained at http://www.epa.gov/swercepp or by calling 1-800-424-9346. These requirements must be complied with no later than the latest of the following dates: (1) June 21, 1999; (2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or (3) The date on which a regulated substance is first present above a threshold quantity in a process.</p>	<p>40 CFR pt. 68</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

Subject Item: GP 001 Rotary Wood Wafer Dryers #3 and #4

- Associated Items:** CE 001 Centrifugal Collector - High Efficiency
 CE 002 Centrifugal Collector - High Efficiency
 CE 003 Electrostatic Precipitator - High Efficiency
 CE 004 Direct Flame Afterburner w/Heat Exchanger
 EU 001 Rotary Wood Wafer Dryer #3
 EU 002 Rotary Wood Wafer Dryer #4
 SV 001

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 6.0 lbs/hour	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Particulate Matter < 10 micron: less than or equal to 6.0 lbs/hour	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Carbon Monoxide: less than or equal to 5.88 lbs/hour	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Volatile Organic Compounds: less than or equal to 8.0 lbs/hour or greater than or equal to 90% destruction efficiency, whichever is less stringent. Destruction efficiency shall be determined by comparing the quantity of emissions from the effluent of the primary cyclones with emissions at SV001.	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Volatile Organic Compounds: less than or equal to 8.0 lbs/hour	Title I Condition: 40 CFR Section 52.21 to remain a non-major source under PSD
Nitrogen Oxides: less than or equal to 8.25 lbs/hour (total from dryers and thermal oxidizer (CE004)).	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Opacity: less than or equal to 20 percent except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1
B. OPERATING REQUIREMENTS AND LIMITS	hdr
Fuel Usage: Limited to (1) dry wood fuel; (2) OSB fuel consisting of treated and clean oriented strand board trim; (3) natural gas; (4) propane; (5) alternate biomass fuels as approved by the MPCA according to the procedures outlined in this permit.	Minn. R. 7007.0800, subp. 2
Biomass Fuel Usage: The permittee may use specific biomass fuels subject to approval from the MPCA. "Biomass" means the materials defined in Minn. Stat. Section 216C.051, Subd. 7, including herbaceous crops, trees, agricultural waste, and aquatic plant matter and excluding mixed municipal solid waste as defined in Minn. Stat. Section 115A.03. For each biomass fuel type the permittee may initiate a trial period consisting of no more than 90 days where that fuel type is combusted. In order to continue operation with this fuel the permittee shall submit a proposal, subject to MPCA written approval, providing details of the new fuel (such as proximate and ultimate analyses), the method of introduction into the combustion chamber and an estimate of the change in emissions of regulated pollutants. If the emissions change is uncertain or if an increase in emissions is indicated, the permittee shall include a schedule for performance testing in the proposal.	Minn. R. 7007.0800, subp. 2
Air Pollution Control Equipment Requirements: the Permittee shall maintain operation of the cyclones (CE001 and CE002), wet electrostatic precipitator (CE003), and the thermal oxidizer (CE004) associated with the emission units described above under Associated Items. The Permittee shall operate the wet electrostatic precipitator (CE003) associated with these emission units with no less than the number of fields on-line as during the most recent performance test that has shown compliance with the particulate matter limit standards described for this Group.	Title I Condition: 40 CFR 52.21; to obtain PSD BACT limits
Temperature: greater than or equal to 1541 degrees F using 3-hour Rolling Average at the combustion chamber of CE004 until a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average chamber temperature recorded during the most recent performance test where compliance for VOC emissions was demonstrated. For the first three hours after CE004 startup, the continuous average chamber temperature shall be used instead of the 3-hour rolling average basis.	Title I Condition: 40 CFR 52.21; Minn. R. 7017.2025, subp. 3; monitoring for BACT limit
Record Keeping: Once each day while in operation the Permittee shall monitor and record the quench water flow rate and number of electric fields that are on or off in CE003. The average combustion chamber temperature of CE004 shall be continuously recorded on a 3-hour rolling average basis.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 1,825 days after Permit Issuance and every five years thereafter to determine total particulate matter, particulate matter < 10 micron, opacity, carbon monoxide, volatile organic compounds and nitrogen oxides emissions from SV001. The interval between performance tests shall be no greater than 60 months.	Title I Condition: 40 CFR 52.21 and Minn. R. 7017.2020, subp. 1; Monitoring for PSD BACT limit
Performance Test Notification (written): due 30 days before each performance test.	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before each performance test.	Minn. R. 7017.2030, subp. 2 and 3
Performance Test Pre-test Meeting: due 7 days before each performance test.	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after each performance test.	Minn. R. 7017.2035, subp. 1 and 2
Performance Test Report - Microfiche Copy: due 60 days after the deadline for submittal of the test report.	Minn. R. 7017.2035, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

Subject Item: GP 002 Rotary Wood Wafer Dryers #5 and #6

- Associated Items:** CE 005 Centrifugal Collector - High Efficiency
 CE 006 Centrifugal Collector - High Efficiency
 CE 007 Electrostatic Precipitator - High Efficiency
 CE 008 Direct Flame Afterburner w/Heat Exchanger
 EU 003 Rotary Wood Wafer Dryer #5
 EU 004 Rotary Wood Wafer Dryer #6
 SV 002

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 6.0 lbs/hour	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Particulate Matter < 10 micron: less than or equal to 6.0 lbs/hour	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Carbon Monoxide: less than or equal to 5.88 lbs/hour	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Volatile Organic Compounds: less than or equal to 8.0 lbs/hour or greater than or equal to 90% destruction efficiency, whichever is less stringent. Destruction efficiency shall be determined by comparing the quantity of emissions from the effluent of the primary cyclones with emissions at SV002.	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Volatile Organic Compounds: less than or equal to 8.0 lbs/hour	Title I Condition: 40 CFR Section 52.21 to remain a non-major source under PSD
Nitrogen Oxides: less than or equal to 8.25 lbs/hour (total from dryers and thermal oxidizer (CE008)).	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Opacity: less than or equal to 20 percent except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1
B. OPERATING REQUIREMENTS AND LIMITS	hdr
Fuels Usage: Limited to (1) dry wood fuel; (2) OSB fuel consisting of treated and clean oriented strand board trim; (3) natural gas; (4) propane	Minn. R. 7007.0800, subp. 2
<p>Biomass Fuel Usage: The permittee may use specific biomass fuels subject to approval from the MPCA. "Biomass" means the materials defined in Minn. Stat. Section 216C.051, Subd. 7, including herbaceous crops, trees, agricultural waste, and aquatic plant matter and excluding mixed municipal solid waste as defined in Minn. Stat. Section 115A.03.</p> <p>For each biomass fuel type the permittee may initiate a trial period consisting of no more than 90 days where that fuel type is combusted. In order to continue operation with this fuel the permittee shall submit a proposal, subject to MPCA written approval, providing details of the new fuel (including proximate and ultimate analyses), the method of introduction into the combustion chamber and an estimate of the change in emissions of regulated pollutants. If the emissions change is uncertain or if an increase in emissions is indicated, the permittee shall include a schedule for performance testing in the proposal.</p>	Minn. R. 7007.0800, subp. 2
Air Pollution Control Equipment Requirements: the Permittee shall maintain operation of the cyclones (CE005 and CE006), wet electrostatic precipitator (CE007), and the thermal oxidizer (CE008) associated with the emission units described above under Associated Items. The Permittee shall operate the wet electrostatic precipitator (CE007) associated with these emission units with no less than the number of fields on-line as during the most recent performance test that has shown compliance with the particulate matter limit standards described for this Group.	Title I Condition: 40 CFR 52.21; to obtain PSD BACT limits
Temperature: greater than or equal to 1540 degrees F using 3-hour Rolling Average at the combustion chamber of CE008 until a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average chamber temperature recorded during the most recent performance test where compliance for VOC emissions was demonstrated. For the first three hours after CE008 startup, the continuous average chamber temperature shall be used instead of the 3-hour rolling average basis.	Title I Condition: 40 CFR 52.21; Minn. R. 7017.2025, subp. 3; monitoring for BACT limit
Record Keeping: Once each day while in operation the Permittee shall monitor and record the quench water flow rate and number of electric fields that are on or off in CE007. The average combustion chamber temperature of CE008 shall be continuously recorded on a 3-hour rolling average basis.	Minn. R. 7007.0800, subp. 5
C. PERFORMANCE TESTING REQUIREMENTS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

Performance Test: due 1,825 days after Permit Issuance and every five years thereafter to determine total particulate matter, particulate matter < 10 micron, opacity, carbon monoxide, volatile organic compounds and nitrogen oxides emissions from SV002. The interval between performance tests shall be no greater than 60 months.	Title I Condition: 40 CFR 52.21 and Minn. R. 7017.2020, subp. 1; Monitoring for PSD BACT limit
Performance Test Notification (written): due 30 days before each performance test.	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before each performance test.	Minn. R. 7017.2030, subp. 2 and 3
Performance Test Pre-test Meeting: due 7 days before each performance test.	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after each performance test.	Minn. R. 7017.2035, subp. 1 and 2
Performance Test Report - Microfiche Copy: due 60 days after the deadline for submittal of the test report.	Minn. R. 7017.2035, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

Subject Item: EU 005 North Thermal Oil Heater

Associated Items: SV 003

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.014 lbs/million Btu heat input . Compliance with this limit meets the requirements of the less stringent limit in Minn. R. 7011.0515.	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Particulate Matter < 10 micron: less than or equal to 0.014 lbs/million Btu heat input	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Carbon Monoxide: less than or equal to 0.10 lbs/million Btu heat input	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Volatile Organic Compounds: less than or equal to 0.0028 lbs/million Btu heat input	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Nitrogen Oxides: less than or equal to 0.30 lbs/million Btu heat input	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. OPERATING LIMITS	hdr
Fuels Usage: Limited to (1) natural gas; (2) propane	40 CFR 52.21; modeling assumption
Fuel Usage: less than or equal to 4850 actual cubic feet/minute using 12-hour Average . This limit is amended whenever a performance test is conducted on this emission unit and the MPCA issues a letter verifying the test results, pursuant to Minn. R. 7017.2025, subp. 3.	Minn. R. 7017.2025, subp. 3
Record Keeping: The permittee shall record the amount of each type of fuel combusted and calculate two twelve hour block averages for each operating day by totaling total fuel usage during each twelve period and dividing by the total operating time during that period. Periods of downtime of 15 or minutes shall not be counted as operating time.	Minn. R. 7007.0800, subp. 5; Minn. R. 7017.2025, subp. 3a
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due before 03/31/2002 and every five years thereafter to determine opacity, total particulate matter, particulate matter<10 microns, carbon monoxide, volatile organic compounds and nitrogen oxides emissions from SV003	Title I Condition: 40 CFR 52.21 and Minn. R. 7017.2020, subp. 1; Monitoring for BACT limit
Performance Test Notification (written): due 30 days before each performance test.	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before each performance test.	Minn. R. 7017.2030, subp. 2 and 3
Performance Test Pre-test Meeting: due 7 days before each performance test.	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after each performance test.	Minn. R. 7017.2035, subp. 1 and 2
Performance Test Report - Microfiche Copy: due 60 days after the deadline for submittal of the test report.	Minn. R. 7017.2035, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

Subject Item: EU 006 South Thermal Oil Heater

Associated Items: SV 004

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.014 lbs/million Btu heat input . Compliance with this limit meets the requirements of the less stringent limit in Minn. R. 7011.0515.	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Particulate Matter < 10 micron: less than or equal to 0.014 lbs/million Btu heat input	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Carbon Monoxide: less than or equal to 0.10 lbs/million Btu heat input	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Volatile Organic Compounds: less than or equal to 0.0028 lbs/million Btu heat input	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Nitrogen Oxides: less than or equal to 0.30 lbs/million Btu heat input	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. OPERATING LIMITS	hdr
Fuels Usage: Limited to (1) natural gas; (2) propane	40 CFR 52.21; modeling assumption
Fuel Usage: less than or equal to 4409 actual cubic feet/minute using 12-hour Average . This limit is amended whenever a performance test is conducted on this emission unit and the MPCA issues a letter verifying the test results, pursuant to Minn. R. 7017.2025, subp. 3.	Minn. R. 7017.2025, subp. 3
Record Keeping: The permittee shall record the amount of each type of fuel combusted and calculate two twelve hour block averages for each operating day by totaling total fuel usage during each twelve period and dividing by the total operating time during that period. Periods of downtime of 15 or minutes shall not be counted as operating time.	Minn. R. 7007.0800, subp. 5; Minn. R. 7017.2025, subp. 3a
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due before 03/31/2002 and every five years thereafter to determine opacity, total particulate matter, particulate matter<10 microns, carbon monoxide, volatile organic compounds and nitrogen oxides emissions from SV004	Title I Condition: 40 CFR 52.21 and Minn. R. 7017.2020, subp. 1; Monitoring for BACT limit
Performance Test Notification (written): due 30 days before each performance test.	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before each performance test.	Minn. R. 7017.2030, subp. 2 and 3
Performance Test Pre-test Meeting: due 7 days before each performance test.	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after each performance test.	Minn. R. 7017.2035, subp. 1 and 2
Performance Test Report - Microfiche Copy: due 60 days after the deadline for submittal of the test report.	Minn. R. 7017.2035, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

Subject Item: EU 007 Board Press

Associated Items: SV 005

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 24.5 lbs/hour	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Particulate Matter < 10 micron: less than or equal to 24.5 lbs/hour	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Volatile Organic Compounds: less than or equal to 45.0 lbs/hour	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Volatile Organic Compounds: less than or equal to 165 tons/year using 365-day Rolling Sum	Title I Condition: 40 CFR Section 52.21 to remain a non-major source under PSD
Carbon Monoxide: less than or equal to 4.50 lbs/hour	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. OPERATING LIMITS	hdr
VOC Emission Factor: the Permittee shall use site generated VOC emission factors and daily press production to determine daily VOC emissions. In the absence of site specific emission factors, the Permittee shall, subject to MPCA approval, use factors published in EPA's AP-42, factors developed by trade organizations or other recognized industry-specific emission factors. The Permittee will submit proposed emission factors to the Agency at least 60 days prior to a requested effective date for using these values.	Title I Condition: 40 CFR Section 52.21 to remain a non-major source under PSD
VOC emissions calculations: once each calendar day, the Permittee shall calculate total VOC emissions from EU007 using the equation in Appendix B of this permit. There will be one emission factor used for commodity grade OSB and individual emission factors for any non-commodity grade product.	Minn. R. 7007.0800, subp. 4(B)
Record Keeping: the Permittee shall record total VOC emissions from EU007 once each calendar day.	Minn. R. 7007.0800, subp. 5
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due before 04/30/2006 and every five years thereafter to determine total particulate matter, particulate matter<10 microns and volatile organic compounds from SV005 while producing commodity grade product.	Title I Condition: 40 CFR 52.21 and Minn. R. 7017.2020, subp. 1; Monitoring for BACT limit
Performance Test: due 60 days after commercial introduction of each new non-commodity product and every five years thereafter to determine site specific emission factors for non-commodity grade product. The interval between performance tests shall not exceed 60 months for each non-commodity grade product. U.S. EPA Method 25 shall be used unless the Permittee and the Agency agree that an alternate method would give equivalent results. "Commercial introduction" means the first production run started to meet orders for the product.	Title I Condition: 40 CFR Section 52.21 to remain a non-major source under PSD
Performance Test Notification (written): due 30 days before each performance test.	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before each performance test.	Minn. R. 7017.2030, subp. 2 and 3
Performance Test Pre-test Meeting: due 7 days before each performance test.	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after each performance test.	Minn. R. 7017.2035, subp. 1 and 2
Performance Test Report - Microfiche Copy: due 60 days after the deadline for submittal of the test report.	Minn. R. 7017.2035, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

Subject Item: EU 008 System 23: Unhogged Raw Fuel System

Associated Items: CE 009 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 016 Centrifugal Collector - Medium Efficiency

SV 006

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.57 lbs/hour and less than or equal to 0.0050 gr/dscf.	Title I Condition: 40 CFR Section 52.21(m) (modeling assumption) and 40 CFR Section 52.21(j) (BACT)
Particulate Matter < 10 micron: less than or equal to 0.57 lbs/hour and less than or equal to 0.0050 gr/dscf.	Title I Condition: 40 CFR Section 52.21(m) (modeling assumption) and 40 CFR Section 52.21(j) (BACT)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. OPERATING AND MONITORING REQUIREMENTS	hdr
Air Pollution Control Equipment Requirements: the Permittee shall maintain operation of the fabric filter whenever EU008 is in operation.	Title I Condition: 40 CFR 52.21; BACT for PM, PM10
Visible Emissions Observation: the Permittee shall observe the emissions from SV006 (during daylight hours) for visible emissions of particulate matter once each day while in operation. The observers are not required to be Method 9 certified opacity readers.	Title I Condition: 40 CFR 52.21; BACT for PM, PM10
Visible Emissions Corrective Actions: If visible emissions (VEs) are observed the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the VEs.	Minn. R. 7007.0800, subp. 2
Visible Emissions Recordkeeping: the Permittee shall record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, the Permittee shall record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 1,825 days after Performance Test on SV0012 or SV017, whichever is sooner, and every five years thereafter to determine total particulate matter and particulate matter<10 microns from SV006	Title I Condition: 40 CFR 52.21 and Minn. R. 7017.2020, subp. 1; Monitoring for BACT limit
Performance Test Notification (written): due 30 days before each performance test.	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before each performance test.	Minn. R. 7017.2030, subp. 2 and 3
Performance Test Pre-test Meeting: due 7 days before each performance test.	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after each performance test.	Minn. R. 7017.2035, subp. 1 and 2
Performance Test Report - Microfiche Copy: due 60 days after the deadline for submittal of the test report.	Minn. R. 7017.2035, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

Subject Item: EU 009 System 24: Fuel Preparation System

Associated Items: CE 010 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 017 Centrifugal Collector - Medium Efficiency

SV 007

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.32 lbs/hour and less than or equal to 0.0050 gr/dscf.	Title I Condition: 40 CFR Section 52.21(m) (modeling assumption) and 40 CFR Section 52.21(j) (BACT)
Particulate Matter < 10 micron: less than or equal to 0.32 lbs/hour and less than or equal to 0.0050 gr/dscf.	Title I Condition: 40 CFR Section 52.21(m) (modeling assumption) and 40 CFR Section 52.21(j) (BACT)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. OPERATING AND MONITORING REQUIREMENTS	hdr
Air Pollution Control Equipment Requirements: the Permittee shall maintain operation of the fabric filter whenever EU009 is in operation.	Title I Condition: 40 CFR 52.21; BACT for PM, PM10
Visible Emissions Observation: the Permittee shall observe the emissions from SV007 (during daylight hours) for visible emissions of particulate matter once each day while in operation. The observers are not required to be Method 9 certified opacity readers.	Title I Condition: 40 CFR 52.21; BACT for PM, PM10
Visible Emissions Corrective Actions: If visible emissions (VEs) are observed the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the VEs.	Minn. R. 7007.0800, subp. 2
Visible Emissions Recordkeeping: the Permittee shall record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, the Permittee shall record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 365 days after Permit Issuance and every five years thereafter to determine total particulate matter and particulate matter<10 microns from SV007.	Title I Condition: 40 CFR 52.21 and Minn. R. 7017.2020, subp. 1; Monitoring for BACT limit
Performance Test Notification (written): due 30 days before each performance test.	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before each performance test.	Minn. R. 7017.2030, subp. 2 and 3
Performance Test Pre-test Meeting: due 7 days before each performance test.	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after each performance test.	Minn. R. 7017.2035, subp. 1 and 2
Performance Test Report - Microfiche Copy: due 60 days after the deadline for submittal of the test report.	Minn. R. 7017.2035, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

Subject Item: EU 010 System 28: Blending/Forming System

Associated Items: CE 011 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 018 Centrifugal Collector - Medium Efficiency

SV 008

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 1.40 lbs/hour and less than or equal to 0.0050 gr/dscf.	Title I Condition: 40 CFR Section 52.21(m) (modeling assumption) and 40 CFR Section 52.21(j) (BACT)
Particulate Matter < 10 micron: less than or equal to 1.40 lbs/hour and less than or equal to 0.0050 gr/dscf.	Title I Condition: 40 CFR Section 52.21(m) (modeling assumption) and 40 CFR Section 52.21(j) (BACT)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. OPERATING AND MONITORING REQUIREMENTS	hdr
Air Pollution Control Equipment Requirements: the Permittee shall maintain operation of the fabric filter whenever EU010 is in operation.	Title I Condition: 40 CFR 52.21; BACT for PM, PM10
Visible Emissions Observation: the Permittee shall observe the emissions from SV008 (during daylight hours) for visible emissions of particulate matter once each day while in operation. The observers are not required to be Method 9 certified opacity readers.	Title I Condition: 40 CFR 52.21; BACT for PM, PM10
Visible Emissions Corrective Actions: If visible emissions (VEs) are observed the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the VEs.	Minn. R. 7007.0800, subp. 2
Visible Emissions Recordkeeping: the Permittee shall record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, the Permittee shall record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 1,825 days after Permit Issuance and every five years thereafter to determine total particulate matter and particulate matter<10 microns from SV008.	Title I Condition: 40 CFR 52.21 and Minn. R. 7017.2020, subp. 1; Monitoring for BACT limit
Performance Test Notification (written): due 30 days before each performance test.	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before each performance test.	Minn. R. 7017.2030, subp. 2 and 3
Performance Test Pre-test Meeting: due 7 days before each performance test.	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after each performance test.	Minn. R. 7017.2035, subp. 1 and 2
Performance Test Report - Microfiche Copy: due 60 days after the deadline for submittal of the test report.	Minn. R. 7017.2035, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

Subject Item: EU 011 System 29: Flying Cutoff Saw System

Associated Items: CE 012 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 019 Centrifugal Collector - Medium Efficiency

SV 009

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 1.30 lbs/hour and less than or equal to 0.0050 gr/dscf.	Title I Condition: 40 CFR Section 52.21(m) (modeling assumption) and 40 CFR Section 52.21(j) (BACT)
Particulate Matter < 10 micron: less than or equal to 1.30 lbs/hour and less than or equal to 0.0050 gr/dscf.	Title I Condition: 40 CFR Section 52.21(m) (modeling assumption) and 40 CFR Section 52.21(j) (BACT)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. OPERATING AND MONITORING REQUIREMENTS	hdr
Air Pollution Control Equipment Requirements: the Permittee shall maintain operation of the fabric filter whenever EU011 is in operation.	Title I Condition: 40 CFR 52.21; BACT for PM, PM10
Visible Emissions Observation: the Permittee shall observe the emissions from SV009 (during daylight hours) for visible emissions of particulate matter once each day while in operation. The observers are not required to be Method 9 certified opacity readers.	Title I Condition: 40 CFR 52.21; BACT for PM, PM10
Visible Emissions Recordkeeping: the Permittee shall record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, the Permittee shall record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5
Visible Emissions Corrective Actions: If visible emissions (VEs) are observed the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the VEs.	Minn. R. 7007.0800, subp. 2
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 365 days after Permit Issuance and every five years thereafter to determine total particulate matter and particulate matter<10 microns from SV009	Title I Condition: 40 CFR 52.21 and Minn. R. 7017.2020, subp. 1; Monitoring for BACT limit
Performance Test Notification (written): due 30 days before each performance test.	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before each performance test.	Minn. R. 7017.2030, subp. 2 and 3
Performance Test Pre-test Meeting: due 7 days before each performance test.	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after each performance test.	Minn. R. 7017.2035, subp. 1 and 2
Performance Test Report - Microfiche Copy: due 60 days after the deadline for submittal of the test report.	Minn. R. 7017.2035, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

Subject Item: EU 012 System 17: Wafer Storage System

Associated Items: CE 013 Fabric Filter - Low Temperature, i.e., T<180 Degrees F
SV 010

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.73 lbs/hour and less than or equal to 0.0050 gr/dscf.	Title I Condition: 40 CFR Section 52.21(m) (modeling assumption) and 40 CFR Section 52.21(j) (BACT)
Particulate Matter < 10 micron: less than or equal to 0.73 lbs/hour and less than or equal to 0.0050 gr/dscf.	Title I Condition: 40 CFR Section 52.21(m) (modeling assumption) and 40 CFR Section 52.21(j) (BACT)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. OPERATING AND MONITORING REQUIREMENTS	hdr
Air Pollution Control Equipment Requirements: the Permittee shall maintain operation of the fabric filter whenever EU012 is in operation.	Title I Condition: 40 CFR 52.21; BACT for PM, PM10
Visible Emissions Observation: the Permittee shall observe the emissions from SV010 (during daylight hours) for visible emissions of particulate matter once each day while in operation. The observers are not required to be Method 9 certified opacity readers.	Title I Condition: 40 CFR 52.21; BACT for PM, PM10
Visible Emissions Corrective Actions: If visible emissions (VEs) are observed the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the VEs.	Minn. R. 7007.0800, subp. 2
Visible Emissions Recordkeeping: the Permittee shall record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, the Permittee shall record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 730 days after Permit Issuance and every five years thereafter to determine total particulate matter and particulate matter<10 microns from SV010	Title I Condition: 40 CFR 52.21 and Minn. R. 7017.2020, subp. 1; Monitoring for BACT limit
Performance Test Notification (written): due 30 days before each performance test.	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before each performance test.	Minn. R. 7017.2030, subp. 2 and 3
Performance Test Pre-test Meeting: due 7 days before each performance test.	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after each performance test.	Minn. R. 7017.2035, subp. 1 and 2
Performance Test Report - Microfiche Copy: due 60 days after the deadline for submittal of the test report.	Minn. R. 7017.2035, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

Subject Item: EU 013 System 30: Trim Saw System

Associated Items: CE 014 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 020 Centrifugal Collector - Medium Efficiency

SV 011

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 1.70 lbs/hour and less than or equal to 0.0050 gr/dscf.	Title I Condition: 40 CFR Section 52.21(m) (modeling assumption) and 40 CFR Section 52.21(j) (BACT)
Particulate Matter < 10 micron: less than or equal to 1.70 lbs/hour and less than or equal to 0.0050 gr/dscf.	Title I Condition: 40 CFR Section 52.21(m) (modeling assumption) and 40 CFR Section 52.21(j) (BACT)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. OPERATING AND MONITORING REQUIREMENTS	hdr
Air Pollution Control Equipment Requirements: the Permittee shall maintain operation of the fabric filter whenever EU013 is in operation.	Title I Condition: 40 CFR 52.21; BACT for PM, PM10
Visible Emissions Observation: the Permittee shall observe the emissions from SV011 (during daylight hours) for visible emissions of particulate matter once each day while in operation. The observers are not required to be Method 9 certified opacity readers.	Title I Condition: 40 CFR 52.21; BACT for PM, PM10
Visible Emissions Corrective Actions: If visible emissions (VEs) are observed the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the VEs.	Minn. R. 7007.0800, subp. 2
Visible Emissions Recordkeeping: the Permittee shall record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, the Permittee shall record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 1,825 days after Performance Test on SV008 and every five years thereafter to determine opacity, total particulate matter and particulate matter<10 microns from SV011	Title I Condition: 40 CFR 52.21 and Minn. R. 7017.2020, subp. 1; Monitoring for BACT limit
Performance Test Notification (written): due 30 days before each performance test.	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before each performance test.	Minn. R. 7017.2030, subp. 2 and 3
Performance Test Pre-test Meeting: due 7 days before each performance test.	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after each performance test.	Minn. R. 7017.2035, subp. 1 and 2
Performance Test Report - Microfiche Copy: due 60 days after the deadline for submittal of the test report.	Minn. R. 7017.2035, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

Subject Item: EU 014 System 33: Board Finishing System

Associated Items: CE 015 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 021 Centrifugal Collector - Medium Efficiency

SV 012

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 1.50 lbs/hour and less than or equal to 0.0050 gr/dscf.	Title I Condition: 40 CFR Section 52.21(m) (modeling assumption) and 40 CFR Section 52.21(j) (BACT)
Particulate Matter < 10 micron: less than or equal to 1.50 lbs/hour and less than or equal to 0.0050 gr/dscf.	Title I Condition: 40 CFR Section 52.21(m) (modeling assumption) and 40 CFR Section 52.21(j) (BACT)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. OPERATING AND MONITORING REQUIREMENTS	hdr
Air Pollution Control Equipment Requirements: the Permittee shall maintain operation of the fabric filter whenever EU014 is in operation.	Title I Condition: 40 CFR 52.21; BACT for PM, PM10
Visible Emissions Observation: the Permittee shall observe the emissions from SV012 (during daylight hours) for visible emissions of particulate matter once each day while in operation. The observers are not required to be Method 9 certified opacity readers.	Title I Condition: 40 CFR 52.21; BACT for PM, PM10
Visible Emissions Corrective Actions: If visible emissions (VEs) are observed the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the VEs.	Minn. R. 7007.0800, subp. 2
Visible Emissions Recordkeeping: the Permittee shall record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, the Permittee shall record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5
C. PERFORMANCE TESTING REQUIREMENTS	hdr
Performance Test: due 730 days after Permit Issuance and every five years thereafter to determine total particulate matter and particulate matter<10 microns from SV012	Title I Condition: 40 CFR 52.21 and Minn. R. 7017.2020, subp. 1; Monitoring for BACT limit
Performance Test Notification (written): due 30 days before each performance test.	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before each performance test.	Minn. R. 7017.2030, subp. 2 and 3
Performance Test Pre-test Meeting: due 7 days before each performance test.	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after each performance test.	Minn. R. 7017.2035, subp. 1 and 2
Performance Test Report - Microfiche Copy: due 60 days after the deadline for submittal of the test report.	Minn. R. 7017.2035, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

Subject Item: EU 015 Diesel Fire Pump**Associated Items: SV 013**

What to do	Why to do it
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	Minn. R. 7011.2300, subp. 2
Fuel Usage: Limited to distillate fuel oil.	Minn. R. 7007.0800, subp. 2

TABLE B: SUBMITTALS

12/03/01

Facility Name: Potlatch - Grand Rapids
Permit Number: 06100010 - 001

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.

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 any application for a permit or permit amendment to:

Permit Technical Advisor
Permit Section
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

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.

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

Supervisor
Compliance Determination Unit
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

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

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

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Computer Dispersion Modeling Information	due 1,096 days after Permit Issuance. Submit modeling data as specified in MPCA guidance for Modeling Information Requests for PM10. This modeling information is for data collection purposes, no modeling analysis is required at this time. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Total Facility
Operation and Maintenance Plan	due 90 days after Permit Issuance, summarizing the operation and maintenance for all listed pollution control equipment. The plan shall include the manufacturer's recommended operation ranges for parameters such as pressure drop across the system, liquid flow rate, liquid supply pressure, etc; corrective action procedures to be followed to return the control equipment to within specified range(s); corrective action procedures to be followed in the event of a malfunction or breakdown; a description of inspection procedures to be followed; and records kept to demonstrate plan implementation.	Total Facility

TABLE B: RECURRENT SUBMITTALS

12/03/01

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010 - 001

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
Compliance Certification	due 31 days after end of each calendar year following Permit Issuance (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner, and to the U.S. EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility
Emissions Inventory Report	due 91 days after end of each calendar year following Permit Issuance (April 1). To be submitted on a form approved by the Commissioner.	Total Facility

APPENDIX MATERIAL

Facility Name: Potlatch - Grand Rapids

Permit Number: 06100010-001

Appendix B – VOC Emissions Calculation for EU007

The following equation shall be used for calculating VOC emissions from EU007:

$$N = \left(\sum_i^n EF_i \frac{lbVOC}{TFP} \times P_i \frac{TFP}{day} \right) \times \frac{1ton}{2000lbVOC}$$

Where:

- N is the total VOC emissions from EU007 for a calendar day (tons VOC/day);
- EF_i is the approved VOC emission factor for a given product;
- P_i is the press production of that product for that day; and
- TFP is tons of finished product, the measurement unit of press production

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 06100010-001

This technical support document is for all the interested parties of the draft permit. The purpose of this document is to set forth the legal and factual basis for the draft permit conditions, including references to the applicable statutory or regulatory provisions.

1. General Information

1.1. Applicant and Stationary Source Location:

Owner and Operator Address and Phone Number	Facility Address (SIC Code: 2493)
Potlatch Corporation 502 County Road 63 Grand Rapids, Minnesota 55744 (218) 327-3650	502 County Road 63 Grand Rapids, MN 55744 Itasca County

1.2. Description Of The Facility.

Potlatch Corporation (Potlatch) owns and operates an oriented strand board (OSB) facility just west of Grand Rapids. The facility produces OSB of varying thickness for flooring, roofing, and sheathing applications. The facility operates two twelve-hour shifts, seven days per week. One hundred inch logs are trucked to the plant. The logs are loaded into the log pond which thaws them in the winter and also conveys them into the facility to be debarked and flaked. The wafers generated are then dried in one of four triple-pass drum dryers. The dryers are fired by dry wood fines, board trim and/or natural gas. The dried wafers are then mixed with resin and wax and then metered in layers that are in alternating orientation on a moving mat. The mat is separated into lengths by a traveling saw and then loaded into the press. The heat and pressure activates the resin. Twelve mats can be loaded into the press so that they can all be pressed at once. The sheet is then trimmed, the edges are sprayed with a protective coating, and the sheet is packaged and shipped to customers.

The heat source for the press is oil which is heated by two natural gas fired thermal oil heaters. Bark, broken and small log ends, board trim and sawdust are sold for fuel .

The pollution control equipment and main pollutants of concern from the emission units at the facility are as follows: The four dryers are sources of volatile organic compounds (VOC), carbon monoxide (CO), nitrogen oxides (NOx) and particulate matter (PM and PM10). They are controlled by cyclones, wet electrostatic precipitators (ESPs), and thermal oxidizers (RTOs). The press is uncontrolled and is primarily a source of VOC. The thermal oil heaters are uncontrolled and are sources of NOx. The in-plant particulate sources are generally controlled by cyclones followed by baghouses. There are also fugitive particulate sources such as bark and fuel piles and paved and unpaved roads.

1.3 Description of any changes allowed with this permit issuance

This permit incorporates applicable requirements from the February 28, 1995, PSD permit with the more stringent BACT limits for the dryers established in air emission permit 06100010-006 issued on November 28, 2000. Significant changes to the total facility permit are described below.

In August 2001 Potlatch supplemented its Title V permit application, proposing a more stringent VOC emission limit on the press in addition to the more stringent limits already established for the dryers. This lower VOC emission limit is sufficient to now make this facility a synthetic minor source under PSD for PM, PM10, CO and VOC. The facility is a minor source for SO₂ and Pb, and is now considered a minor source for NO_x based on currently available emissions test data and emission factors.

Based on MPCA conversations with EPA staff in November 2000 and August 2001, the MPCA agrees that the facility can become a synthetic minor source under the PSD program under the following conditions: (1) that the existing BACT limits remain in place; (2) that the last two years of actual emissions have been well below 250 tons per year per affected pollutant; (3) that the facility shows no intention of modifying the facility such as to exceed 250 tons per year.

All of the emission limits established in earlier permit actions have either been retained or made more stringent. The last two years of actual emissions data (from the 1998 and 1999 emissions inventory) that have been verified by emissions inventory staff are included in Table 1 of this document. These years represent good emissions estimates as much of the data was based on stack test results. Preliminary results for the 2000 emission inventory show some higher numbers as Minnesota Rules prohibit the use of performance test data that is more than five years old. For the year 2000 inventory it was necessary for Potlatch to revert to using permit emission limits for its emission factors, which changes the calculation basis but does not represent a real increase in actual emissions. The MPCA believes that 1998-1999 comprises the most representative recent data.

Potlatch has requested the flexibility to produce non-commodity OSB products (i.e. value-added specialty products utilizing additives to impart specific properties), which may increase VOC emissions at the press. In order to do this and at the same time to reduce annual potential emissions, Potlatch has proposed an additional VOC limit on a 365-day rolling sum basis. The associated equation, in Appendix B of the permit, uses product-specific emission factors and production data to calculate the rolling annual emission rate and provides a compliance determination with the long-term limit every day. The emission factors will initially be proposed by Potlatch, reviewed by the MPCA and will be used until Potlatch has conducted a performance test and submitted the results to the MPCA. The existing BACT limit remains in place to limit short term VOC emissions from the press. The wood species limitation and the press production rate

limits have not been included in this permit as the addition of the long term VOC limit, with its own record keeping, make these requirements redundant.

Periodic monitoring requirements have been added as appropriate for air pollution control equipment (e.g. visible emissions observations for baghouses, continuous temperature monitoring for thermal oxidizers). Stack testing frequencies have been established based on ample past test data for this facility and internal MPCA testing guidance. A copy of the test frequency guidance document is available on request. In summary, the current guidance states that if a compliance test result is less than 60% of the permitted limit, that unit does not have to be tested again for that pollutant for five (5) years. For test results above 60% but less than 90%, retesting for that pollutant is required within 3 years. Compliance test results that are between 90% and 100% of the emission limit will require annual compliance testing. This guidance was used to determine the test frequencies for all emission units listed in this permit.

Rotary Dryers (GP001, GP002)

Potlatch was authorized to replace all four rotary dryers in the PSD major permit amendment of November 28, 2000. In that permit action, Potlatch agreed to accept lower BACT emission rates for PM, PM₁₀, VOC and NO_x, as the actual test results were far below the established emission rates. As a result of that permit action, the entire facility could be classified as a PSD synthetic minor for PM, PM₁₀, and NO_x. Actual emissions data from the facility indicate that the facility could have been classified as a natural minor for NO_x, although this does not now impact past permitting decisions. It should also be noted that the impact on NO_x emission of allowing alternative biomass fuels at the dryer heat source is unknown, so the NO_x emission limit could serve as synthetic minor limits in the event that actual emissions of NO_x were to increase.

This permit removed the throughput limitation of 33,000 OD lb/hr for the four rotary dryers. It was decided that this limitation was no longer necessary, as the facility's PTE is based on the listed, controlled emission rate times 8760 hours per year.

Thermal Oil Heaters (EU005, EU006):

These units provide hot oil to the board press, and currently are natural gas fired. The facility demonstrated compliance with the BACT limits in 1996 and will be required to test again in 2002. As the BACT emission limits from the 1995 permit remain in place, there are no changes to any permit terms for the thermal oil heaters. The permit incorporates limits on natural gas usage established after the 1996 performance tests. In practice the units do not operate close to maximum capacity as the plant does not require that level of output. The permittee may be able to propose an alternate definition of worst case operation, based on plant demands for heated oil, and if worst case testing is conducted these natural gas usage limits would cease to be effective, thus easing record keeping burden on the facility.

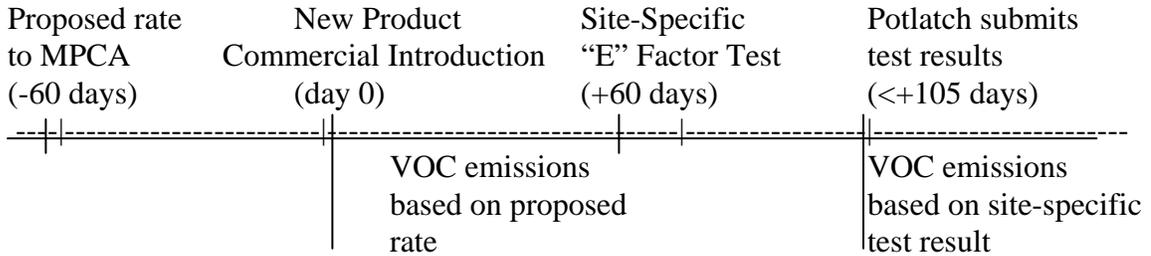
Board Press (EU007):

The 1995 permit had an hourly VOC emission limit of 45 lb/hr and an operational restriction of 30 tons finished product per hour (potential of 262,800 tons finished product per year). These two permit terms were required to effectively limit potential VOC emissions from the OSB press to 197.1 tons per year. This permit keeps the hourly BACT limit of 45 lb/hr and includes a VOC emission limit of 165 tons VOC per year, a 32.1 ton per year reduction in potential emissions from that authorized in the 1995 permit. Potlatch will have to calculate press VOC emissions on a daily basis and calculate a 365-day rolling sum. Thus compliance with annualized press VOC emissions is assured every day.

There are two parameters necessary to calculate the daily VOC emissions; approved VOC emission factors and daily press production. The intent of having MPCA-approved emission factors for various products is twofold. First, this method yields the most accurate VOC calculations for a given type of manufactured product (commodity grade OSB or a specialty product). Second, having different approved VOC emission factors gives Potlatch more flexibility in manufacturing new specialty products while ensuring on a daily basis that compliance with the press VOC limit is attained. The emission factors proposed by Potlatch can be based on site-specific compliance demonstration results, U.S. EPA AP-42 published factors, factors developed by trade organizations, or other recognized industry-specific emission factors. For all of these options, the MPCA will have at least 60 days to review the proposed factors before their effective date. Additionally, Potlatch will have to complete a compliance demonstration to determine site-specific VOC emission factors within 60 days of a specialty (non-commodity grade OSB) product achieving commercial introduction. The test-generated factor will replace the initial factor as of the date Potlatch submits the performance test report, although this is subject to correction upon MPCA review of the test results.

The permit also requires that the facility keep daily press production records for each type of product manufactured, and that daily VOC emissions will be calculated based on the quantity of product made and the applicable VOC emission rate for that type of product.

An example will help illustrate the relationship between proposed emission factors, commercial introduction and VOC calculations.



During the time between commercial introduction of a specialty product (day 0) and the date that Potlatch submits the test report, the proposed VOC emission rate will be used to calculate the portion of facility VOC emissions from that specific product. After Potlatch submits the test report, the VOC emission factor from that test will be used for future calculations for the applicable specialty product.

Wood Waste Handling Operations (EU008, 009, 010,011,012, 013, 014):

A change was made in this permit with regard to the monitoring of pressure drop across the baghouses. The previous requirements to maintain daily pressure drop records were eliminated and a requirement to keep daily visible emission observations, take appropriate corrective actions and maintain records of these corrective actions was added. This method of periodic monitoring for low temperature baghouses is consistent with the MPCA’s approach across the state and with other previously EPA-approved wood products plant Title V permits. The PM/PM₁₀ emission limits for these baghouses were carried over from the 1995 permit.

Diesel Fire Pump (EU 015):

EPA policy and MPCA practice allows for calculation of potential to emit using 500 hours rather than 8760 hours of operating time. Under this method of calculation, the PTE for NOx still exceeds the maximum allowed to be considered an insignificant activity and therefore the unit is listed in the permit. As actual operating hours are much lower than 500 hours per year, the MPCA has not established periodic monitoring requirements for this unit.

Fugitive Dust Sources

The permit requires that the requirements of the 1995 permit, specifically Section 6.16, for paved and unpaved roads and parking lot areas, be carried forward into the fugitive dust control plan. As Potlatch has submitted a draft plan for review, which is now subject to MPCA review, the permit document itself does not contain specific control measures. Rather, the plan is referenced within the permit and is an enforceable as part

of the permit. A copy of the September 7, 2001, draft plan is attached to this technical support document.

Synthetic Minor Limitations

Potlatch has opted to make this Title V permit a synthetic minor PSD permit as well. The uncontrolled potential to emit from the facility for PM, PM₁₀, VOC and CO is greater than 250 TPY and thus would be a major PSD source; NO_x, SO₂ and Pb have PTEs of less than 250 TPY each and thus they are naturally “non-major” under PSD regulations. Potlatch is choosing to take a limit on VOC in addition to the limits taken in the November 2000 permit to limit the plant below the PSD major source threshold.

In terms of PM and PM₁₀, the facility has carried forward limits on the rotary dryers (GP001 and GP002), thermal oil heaters (EU005, 006), board press (EU007) and the wood waste handling systems (EU008, 009, 010, 011, 012, 013 and 014). There are no PTE changes for either PM or PM₁₀ in this permit. The total PTE from all point sources is 196.5 TPY for PM and PM₁₀, which is below the PSD major source threshold of 250 TPY.

This permit carries forward CO limits on the rotary dryers (GP001 and GP002), thermal oil heaters (EU005, 006) and board press (EU007). There are no PTE changes for CO in this permit. The total PTE from all point sources is 96.8 TPY, which is below the PSD major source threshold .

VOC potential emissions are also limited so that this facility becomes a PSD synthetic minor facility. The facility has carried forward limits on the rotary dryers (GP001 and GP002) and Thermal Oil Heaters (EU 005, 006) from the previous permit actions. Board press (EU007) hourly BACT emission limits remain the same from the 1995 permit, but there is a lower annual PTE restriction. The board press is the largest source of VOC emissions and has the most detailed compliance requirements to ensure that VOC emissions do not exceed the permitted level of 165 TPY. The total PTE from all point sources is 236 TPY. Also, an additional limit for VOC was added to GP001 and GP002 at the same mass emission rate as the existing BACT limit. The MPCA has included this additional hourly emission limit because the BACT limit allows for compliance to be demonstrated on a destruction efficiency basis, which could potentially allow emissions higher than the BACT mass rate limit.

Limits for NO_x on the rotary dryers (GP001 and GP002) and thermal oil heaters (EU005, 006) have been carried forward unchanged from previous permits and therefore the PTE for NO_x remains at 157.9 TPY, unchanged from the November 2000 permit.

This permit carries forward the requirement to conduct periodic performance (stack) testing and as such all emission units will be tested within five years of a previous compliance test. This is another way that the facility will guarantee that annual emissions remain below PSD major source thresholds.

1.4 Description of all amendments issued since the issuance of the last total facility permit and to be included in the Part 70 Permit.

Permit Number and Issuance Date	Action Authorized
#636B-84-I-2 3/5/84	Permit to install two heat exchange/recovery economizers on the four wafer dryers
#636B-93-P-1 4/8/93	Permit to increase the stack height on the press (project completed in late 1994)
PSD Permit 06100010-003 February 28, 1995	Total facility PSD permit
Major amendment 06100010-006 November 28, 2000	Major amendment permit to replace four wafer dryers

A waferboard facility (Blandin Wood Products) was first built in 1972 on the site now owned by Potlatch. On September 28, 1979 a permit was issued for the installation of a new OSB plant near the existing plant. The previous plant was shut down when the new one was opened. Performance (stack) testing was done at the facility in 1989 and again in 1990. The testing showed that the facility was a major source under PSD for PM, VOC and CO. Based on emission factors, assumptions and limits proposed at that time the facility was also considered a major source for NOx. Potlatch purchased the facility in 1990. In 1991 work began on a PSD permit for the facility. In January 1994 a stipulation agreement was signed between Potlatch and the MPCA where Potlatch agreed to install WESPs on the rotary dryers for enhanced particulate control in response to alleged excess PM emissions from the facility. On the same day, a compliance agreement was signed between Potlatch and the MPCA that addressed alleged PSD violations at its Grand Rapids, Bemidji and Cook facilities. That agreement required Potlatch to install thermal oxidizers on the dryers at the Grand Rapids facility in order to further evaluate the technical feasibility of thermal oxidizers as BACT on OSB rotary dryers. The compliance agreement also contained a testing schedule and emission limits for PM and VOC from these units. The agreement required Potlatch to supply any further information MPCA needed to complete a backward PSD permit for the facility. That permit was issued on February 28, 1995.

1.5. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary:

Emission Unit Description	PM tpy	PM10 tpy	SO2 tpy	NOx tpy	CO tpy	VOC tpy	Single HAP** tpy	All HAPs tpy
Dryers GP001	26.28	26.28	1.52	36.14	25.75	35.04	2.38	10.09
Dryers GP002	26.28	26.28	1.52	36.14	25.75	35.04	2.38	10.09
N. Thermal Oil Heater	1.75	1.75	0.07	37.45	12.48	0.35		0.01
S. Thermal Oil Heater	1.75	1.75	0.07	37.45	12.48	0.35		0.01
Press	107.3	107.3	7.75	7.97	19.71	165.0	63.1	89.29
Baghouse Systems	32.94	32.94						
Diesel Fire Pump	0.19	0.19	0.18	2.71	0.58	0.22		0.06

	PM tpy	PM10 tpy	SO2 tpy	NOx tpy	CO tpy	VOC tpy	Single HAP** tpy	All HAPs tpy
Total Facility Limited Potential Emissions	196.5	196.5	11.1	157.9	96.8	236.0	67.8	109.5
Change from 11/28/00 amended permit	0	0	0	0	0	-32.1	0	0
Change from 2/28/95 permit	-78.8	-78.8	0	-271.2	0	-48.7	0	0

Total Facility Actual Emissions (1999)*	53.2	36.6	7.8	42.3	48.4	41.7	52.9	79.7
Total Facility Actual Emissions (1998)*	61.9	48.4	7.1	42.3	40.3	38.0	54.8	81.9

*These are the last two MPCA-verified emission inventory numbers

** Methanol

Table 2. Facility(TF) and Permit Classification

Classification (put x in appropriate box)	Major/Affected Source	*Synthetic Minor	*Minor
PSD (list pollutant)		PM, PM ₁₀ , VOC, CO	NOx, SO ₂ , Pb
NAAR (list pollutant)			
Part 70 Permit Program (list pollutant)	PM, PM ₁₀ , NO _x , VOC, HAPs	CO	SO ₂ , Pb

* Refers to potential emissions that are less than those specified as major by 40 CFR 52.21, 40 CFR pt. 51 Appendix S, and 40 CFR pt. 70.

2. Regulatory and/or Statutory Basis

Summary Regulatory and/or Statutory Basis of the Emission or operational Limit

Regulatory Overview of Facility

EU, GP or SV#	Applicable Regulations	Comments:
FC	Minn. R. 7007.0800, subp. 2	Air dispersion modeling information required for PM ₁₀ consistent with June 2001 MPCA guidance.
FC	Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0800, subp. 2	Compliance with fugitive dust control plan required. May be amended, subject to MPCA approval, but should continue to reflect concepts of permit 06100010-003, Section 6.16.
EU007, GP001, GP002	40 CFR Section 52.21	VOC synthetic minor limit using product-specific emission factors to determine compliance on a 365-day rolling sum basis. VOC synthetic minor limit on dryers, more stringent than BACT limit as it does not allow 90% destruction efficiency option.
EU008-EU014	40 CFR Section 52.21; Minn. R. 7007.0800, subp. 2	Daily visible emission checks on baghouses – periodic monitoring for BACT limits.
GP001-002, EU005-014	40 CFR Section 52.21(j)	Prevention of Significant Deterioration. BACT limits established in 1995 PSD permit for PM, PM ₁₀ , CO, VOC and NOx.
GP001-002, EU005-014	40 CFR Section 52.21 and Minn. R. 7017.2020, subp. 1	Periodic stack testing to evaluate emissions against synthetic minor and BACT limits.
GP001-002, EU005-006	Minn. R. 7017.2025, subp. 3	Operational limits based on previous stack tests. Limits amendable with subsequent tests.

3. Technical Information

Potlatch conducted air dispersion modeling for PM, NOx and CO in 1991, which was supplemented in 1993. An additional air quality impact analysis was done in support of air emissions permit 06100010-006 which authorized replacement of four dryers. In accordance with the MPCA policy memo dated June 8, 2001, Potlatch is not required to re-model during the effective period of this permit unless modeling requirements are triggered by a facility modification. Further Title V permit modeling guidance was publicized in August 2001. Based on that document, the facility is required only to provide dispersion modeling information and need not conduct dispersion modeling.

4. Conclusion

Based on the information provided by Potlatch, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 06100010-001 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Stuart Arkley, Bob Beresford, Trent Wickman
Peer Review: Paula Connell

Attachments: 1) Draft Fugitive Dust Control Plan (submitted September 7, 2001)
2) Form GI-07 and EC forms (from August 2001 supplemental application)

Potlatch Corporation
Grand Rapids OSB Plant

Fugitive Dust Control Plan

(DRAFT – Rev 1)

Date:
09/07/01

Table of Contents

- 1. INTRODUCTION13**
 - 1.1. REGULATORY REQUIREMENT13
 - 1.2. DUST CONTROL SEASON13
 - 1.3. IMPLEMENTATION.....13
- 2. FUGITIVE EMISSION SOURCES.....13**
 - 2.1. LOG TRUCKS13
 - 2.2. FINISHED PRODUCT / DELIVERY VEHICLES13
 - 2.3. EMPLOYEE VEHICLES14
- 3. CONTROL MEASURES.....14**
 - 3.1. PAVED ROADS14
 - 3.2. PAVED PARKING LOTS.....14
 - 3.3. UNPAVED ROADS14
- 4. RECORDKEEPING15**

1. Introduction

This document is intended to provide the fugitive dust control plan for the Grand Rapids OSB plant.

1.1. Regulatory Requirement

The Potlatch Corporation, Wood Products Division, Minnesota Region, Grand Rapids OSB Plant has been issued MPCA Air Emissions Permit 06100010-001.

Table "A" of that permit states that:

Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements of Minn. R. 7011.0150.

Fugitive Dust 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 that the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive dust control plan, then the Permittee may be required to amend the control plan.

Fugitive Dust Control Plan: The Permittee shall follow the actions and record keeping specified in the control plan. Amendments to the plan may be proposed by the Permittee and are subject to review and approval by the Commissioner. The plan shall continue to carry forward the control requirements and preventative measures from Section 6.16 of air emission permit 06100010-003 and shall identify all fugitive emission sources, primary and contingent control measures, and record keeping. If the Commissioner determines the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive emission control plan, then the Permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors.

1.2. Dust Control Season

The dust control season starts on May 1st, and ends on October 15th of each calendar year.

1.3. Implementation

This plan is effective upon review and approval of the Minnesota Pollution Control Agency.

2. Fugitive Emission Sources

Fugitive particulate emissions from this facility are primarily due to vehicle traffic. Wood bark and dried fuel storage piles can also be minor sources for fugitive dust.

2.1. Log Trucks

Logging trucks entering and exiting the plant are the largest single contributor to fugitive particulate emissions. Bark debris, dirt, and vehicle dust are the sources to log truck fugitive emissions. These trucks travel on both paved and unpaved roads.

2.2. Finished Product / Delivery Vehicles

Finished product trucks and other delivery vehicles are contributors to fugitive particulate emissions. Examples of other vehicle traffic include trash removal, wood fuel transportation, parts delivery, resin and/or wax delivery trucks, etc. These vehicles travel on paved roads and unpaved roads.

2.3 . Employee Vehicles

Employee vehicle traffic is a minor contributor to fugitive particulate emissions. Employee traffic is limited to paved roads and parking lots.

2.4 . Wood Fuel Piles

Bark and dried fuel piles can be a minor contributor to fugitive particulate emissions.

3. Control Measures

The primary and secondary fugitive dust control measures are described for each of the four areas described in this plan.

3.1. Paved Roads

All of the paved roads on the plant site are paved with road widths sufficient to allow safe two-way truck traffic without traveling on the shoulder of the road. The major source of deposits on the paved roads includes debris carryout and entrainment from log trucks.

3.1.1. Primary Control

During the dust control season, during non-freezing weather, the plant shall water flush and sweep the paved roads one time each week. If there is at least 0.25" of rainfall in a 24-hour period, the weekly cycle for road water flushing and sweeping shall start over, and the next flushing/sweeping will be required within 7 days, unless sufficient rainfall occurs to restart the cycle again. Plant experience has shown that a rainfall of at least 0.25" in a 24-hour period cleans the paved roads as effectively as water flushing and mechanical sweeping has done. The plant will maintain records to demonstrate compliance with this requirement.

3.1.2. Secondary Control

The following preventative measures shall be done to reduce fugitive dust emissions on paved roads:

- a) All trucks hauling wood fuel or trash shall be covered.*
- b) Speed limits on paved roads shall be posted.*
- c) Potlatch will instruct log truck operators to sweep off their trucks in the proper area before returning to the paved roads.*
- d) During the winter, snow shall be plowed and sand shall be used for traction control.*
- e) Sand shall be broadcast by shovel and mechanical equipment.*
- f) Any residual sand piles left after the spring thaw shall be graded level on the road shoulder.*

3.2. Paved Parking Lots

3.2.1. Primary Control

The paved parking area shall be cleaned with pressurized water once a month during non-freezing conditions throughout the dust control season. If there is at least 0.25" of rainfall in a 24-hour period, the monthly cycle for parking lot pressure washing shall start over, and the next pressure washing will be required within one month, unless sufficient rainfall occurs to restart the pressure washing cycle again. Plant experience has shown that a rainfall of at least 0.25" in a 24-hour period cleans the paved parking area as effectively as manual pressure washing has done. The plant will maintain records to demonstrate compliance with this requirement.

3.2.1. Secondary Control

There are no secondary control measures for this portion of the fugitive dust control plan.

3.3. Unpaved Roads

The unpaved roads on the plant sites provide access to the log yards. The vast majority of plant traffic on unpaved roads is for log delivery / handling. There are other unpaved roads on the site that receive minimal use such as maintenance vehicle access on an as-needed basis.

3.3.1. Primary Control

During the dust control season, during non-freezing weather, plant personnel shall apply chemical dust suppressant (Calcium Chloride, Magnesium Chloride or equivalent) on the log yard unpaved roads. This dust suppressant will initially be applied within the first month of the dust control season according to the supplier's technical recommendations. The chemical dust suppressant will be reapplied as required to maintain effective coverage and dust suppression through the entire dust control season.

3.3.2. Secondary Control

In addition to the chemical dust suppressant applications, the following preventative measures shall be done to enhance the dust control on the unpaved roads:

- a) Employees' vehicles shall be restricted on unpaved roads.
- b) Speed limits on unpaved roads shall be posted at 5 mph.
- c) Log yard unloading equipment shall take the shortest routes possible between the log yard and the plant site.
- d) During the winter, snow shall be plowed on unpaved roads only as necessary for proper and safe access.
- e) Sand shall be broadcast by shovel and mechanical equipment.
- f) After the spring thaw, the unpaved roads shall be graded prior to the first application of the dust season.
- g) Dust suppressant chemicals shall be applied to maintenance roads on an as-needed basis per Potlatch discretion.

3.4. Wood Fuel Piles

Wood bark from the facility is sold off site for fuel. Typically, the fuel is conveyed directly into a waiting truck, but there are occasions where this fuel is stockpiled on site. This unhogged bark has a moisture content of approximately 45% and thus there are minimal fugitive dust emissions from any bark fuel pile. Occasionally, the facility's dry fuel system experiences a process upset and dry wood fuel will be diverted to an outside pile. When dry fuel is diverted outside of a plant building, it can no longer be used as on site fuel and thus it is also sold off site as fuel.

3.4.1. Primary Control

Handling the bark as little as possible minimizes fugitive dust emissions. Whenever practical, plant personnel will load directly into a truck. When this procedure is not feasible, fuel trucks will be filled from the bark stockpile using a front-end loader. The plant will make all efforts to minimize the amount of wood bark fuel that is stockpiled on site. The primary control means for minimizing any fugitive dust emissions from the dry fuel system is to keep the dry fuel system fully operational.

3.4.2. Secondary Control

There are no secondary control measures for the unhogged bark fuel pile. In those infrequent instances where dry fuel is diverted outside the facility's buildings, this material will be mixed with unhogged bark as soon as practical for sale off-site as fuel.

4. Recordkeeping

The plant will maintain adequate records to demonstrate compliance with this plan. These records will cover every day during the dust control season (May 1 to October 15), and include the following information:

1. Daily: Date, outside temperature, rainfall in previous 24 hour period
2. Paved road sweeping: operators initials, start and stop time.
3. Paved parking lot washing: operator initials, start and stop time
4. Chemical dust suppressant applications: approximate start time, operator's initials, type and amount of suppressant used, dilution ratio.

These records will be maintained on site for five years.