AIR EMISSION PERMIT NO. 07500019- 001
IS ISSUED TO

Louisiana-Pacific Corporation

Louisiana-Pacific Corp - Two Harbors
Industrial Park North, Highway 2
Two Harbors, Lake County, Minnesota 55616

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

Permit Type	Application Date
Total Facility Operating Permit	April 13, 1995

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 and with all general conditions listed in Minn. R. pt. 7007.0800, subp. 16, and all standard permit requirements listed in 40 CFR § 70.6(a), which are incorporated by reference. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. pts. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: Federal ; Part 70
Issue Date: **June 14, 1999**
Expiration: **June 14, 2004**

All Title I Conditions do not expire.

Michael J. Sandusky
Division Manager
Air Quality Division

for Karen A. Studders
Commissioner
Minnesota Pollution Control Agency

BAB:yma

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NOTICE TO THE PERMITTEE:

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

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

The rule 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. Any requirements which have been determined not to apply are listed in Table A of this permit.

The permit shield, however does not apply to: Minn. R. ch. 7030 (Noise Pollution Control).

FACILITY DESCRIPTION:

The Louisiana-Pacific facility in Two Harbors, Minnesota is an oriented strand board manufacturing facility that produces structural panel used in various construction applications. This facility is situated on approximately 80 acres located in the Two Harbors Industrial Park and is identified by the Standard Industrial Classification Code 2493.

On May 18, 1984, the plant was issued its initial air emission facility permit to install and operate. In 1996 the total facility permit was revised to account for the addition of a Regenerative Thermal Oxidizer (RTO). U.S. Environmental Protection Agency issued a Consent Decree to Louisiana-Pacific Corporation that required all oriented strand board plants to install RTOs. The Title V Air Permit Application was submitted March 1995. The facility is identified by the Standard Industrial Classification Code 2493.

The air emission units that exist at this plant consist of a rotary wood wafer dryer, two thermal oil heaters, one board press, twenty-two natural gas fired paint drying ovens, painting operations, and three wood waste handling operations.

The rotary wood wafer dryer exhaust is controlled by a wet electrostatic precipitator and the regenerative thermal oxidizer. One thermal oil heater is controlled by a cyclone and a fabric filter. The second thermal oil heater, which is the back-up unit, is fueled by natural gas only and is not equipped with any control equipment. The board press emissions are uncontrolled. Emissions generated by the paint drying ovens are either controlled by the regenerative thermal oxidizer or are uncontrolled. Particulate emissions from wood waste handling are controlled by fabric filters.

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/14/99

Facility Name: Louisiana-Pacific Corp - Two Harbors

Permit Number: 07500019 - 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
Comply with the O&M Plan: Follow the actions and record keeping specified in the O&M plan. The plan may be amended by the Agency's written approval.	Minn. R. 7007.0800, subp. 14; Minn. R. 7007.0800, subp. 16(J)
Comply with Fugitive Control Plan: Follow the actions and recordkeeping specified in the fugitive control plan. The Permittee may be required to amend the fugitive control plan as requested by the Agency.	Minn. R. 7011.0150
Materials Usage Limitation: Wood type processed at the facility shall be limited to a maximum of 10% by cord softwood (e.g. pine) as a fiscal monthly average. The remainder of the wood processed shall be aspen or other hardwood. The Permittee shall maintain weekly records of the type of wood processed. The records shall include the percent by cord of the amount of softwood processed as well as the total amount of wood processed. This data shall be compiled to determine the fiscal monthly total and average.	Title I Condition:40 CFR Section 52.21 to remain a non-major source under PSD
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit.	Minn. R. 7017.2025
Monitoring 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.	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment as described in the approved O&M plan (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks, zero and span adjustments, and chart replacement. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/14/99

Facility Name: Louisiana-Pacific Corp - Two Harbors

Permit Number: 07500019 - 001

Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Record keeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007. 1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007. 0800, subp. 5(B)
Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not federally enforceable.	Minn. R. 7030.0010 - 7030.0080
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.	Minn. R. 7007.0800, subp. 9(A)
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
The Permittee may be required to submit a Risk Management Plan (RMP) under the federal rule, 40 CFR Part 68 which was promulgated on June 20, 1996. The rule will require each owner or operator of a stationary source, at which a regulated substance is present above a threshold quantity in a process, to design and implement an accidental release prevention program. The RMPs must be submitted to a centralized location as specified by US EPA. The Permittee may obtain the RMP submittal information 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.	40 CFR pt. 68

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/14/99

Facility Name: Louisiana-Pacific Corp - Two Harbors

Permit Number: 07500019 - 001

Subject Item: **GP 001 Rotary Wood Wafer Dryer**

Associated Items: CE 001 Electrostatic Precipitator - High Efficiency

CE 002 Direct Flame Afterburner w/Heat Exchanger

EU 001 Rotary Wood Wafer Dryer

SV 001

SV 002

What to do	Why to do it
Total Particulate Matter: less than or equal to 9.75 lbs/hour	Title I Condition: 40 CFR Section 52.21 to remain a non-major source under PSD
Particulate Matter < 10 micron: less than or equal to 9.75 lbs/hour	Title I Condition: 40 CFR Section 52.21 to remain a non-major source under PSD
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
Carbon Monoxide: less than or equal to 30.5 lbs/hour	Title I Condition: 40 CFR Section 52.21 to remain a non-major source under PSD
Volatile Organic Compounds: less than or equal to 9.04 lbs/hour	Title I Condition: 40 CFR Section 52.21 to remain a non-major source under PSD
Fuels Allowed: the Permittee shall only burn wood waste (may include board trim), natural gas, or propane in EU 001.	Minn. R. 7007.0800, subp. 2
Pollution Control Equipment Operation, Monitoring and Record Keeping: the Permittee shall maintain operation of the wet electrostatic precipitator (CE 001) and the regenerative thermal oxidizer (CE 002) associated with GP 001. Once each day, while in operation, the Permittee shall monitor and record whether CE 001 is energized (electric current is being applied to the two T-R sets) and monitor and record the combustion chamber temperature of CE 002 either as a 3-hour rolling average or as an instantaneous reading. If CE 001 is not energized or if the combustion chamber temperature of CE 002 is less than the specified limit, take the corrective actions outlined in the O&M plan. Record all corrective actions taken upon completion of the action.	Minn. R. 7007.0800, subp. 14, Minn. R. 7007.0800, subp. 4, and Minn. R. 7007.0800, subp. 5
Temperature: greater than or equal to 1520 degrees F using 3-hour Rolling Average or as an instantaneous limit that applies all the time, at the Combustion Chamber of CE 002 (the RTO) until a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average burner temperature recorded during the most recent performance test where compliance for VOC and CO emissions was demonstrated.	Minn. R. 7017.2025, subp. 3
Performance Test: due before 07/01/2002 to measure total particulate matter, PM-10, carbon monoxide, and volatile organic compound emissions from SV001.	Minn. R. 7017.2020. subp. 1
Performance Test Pre-test Meeting: due 7 days before Performance Test	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Louisiana-Pacific Corp - Two Harbors

Permit Number: 07500019 - 001

Subject Item: **GP 002 Spray Coating/Drying Oven Operations**

Associated Items: CE 008 Fiberglass Filter w/o Cardboard Frame

EU 008 Coating Drying Oven, Panel

EU 009 Coating Drying Oven, Panel

EU 010 Coating Drying Oven, Lap & Trim

EU 011 Coating Drying Oven, Lap & Trim

EU 012 Coating Drying Oven, Lap & Trim

EU 013 Coating Drying Oven, Lap & Trim

EU 014 Coating Drying Oven, Lap & Trim

EU 015 Coating Drying Oven, Lap & Trim

EU 016 Coating Drying Oven, Lap & Trim

EU 017 Coating Drying Oven, Lap & Trim

EU 018 Coating Drying Oven, Lap & Trim

EU 019 Coating Drying Oven, Lap & Trim

EU 020 Coating Drying Oven, Lap & Trim

EU 021 Coating Drying Oven, Lap & Trim

EU 022 Coating Drying Oven, Lap & Trim

EU 023 Coating Drying Oven, Lap & Trim

EU 024 Coating Drying Oven, Lap & Trim

EU 025 Coating Drying Oven, Lap & Trim

EU 026 Coating Drying Oven, Lap & Trim

EU 027 Coating Drying Oven, Lap & Trim

EU 028 Coating Drying Oven, Lap & Trim

EU 029 Coating Drying Oven, Lap & Trim

EU 030 Spray Coating

EU 031 Spray Coating

EU 032 Spray Coating

EU 033 Spray Coating

EU 034 Unit Spray Booth

SV 001

SV 010

SV 011

SV 012

SV 013

SV 014

SV 015

SV 016

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. 7011.0735.	Minn. R. 7011.0715, subp. 1(A)
Total Particulate Matter: less than or equal to 20 tons/year using 365-day Rolling Sum	Title I Condition: 40 CFR Section 52.21 to remain a non-major source under PSD
Particulate Matter < 10 micron: less than or equal to 20 tons/year using 365-day Rolling Sum	Title I Condition: 40 CFR Section 52.21 to remain a non-major source under PSD
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Volatile Organic Compounds: less than or equal to 100 tons/year using 365-day Rolling Sum	Title I Condition: 40 CFR Section 52.21 to remain a non-major source under PSD

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Louisiana-Pacific Corp - Two Harbors

Permit Number: 07500019 - 001

Record Keeping: the Permittee shall maintain records daily of VOCs and TSP/PM-10 emitted on a 365-day rolling sum basis. These records shall be kept every day for EU 030 through EU 034 and also for EU 008 through EU 029 if these units are not vented to the RTO (CE 002). Specific records to be kept are the gallons of paint used per day, the VOC content of the paint, the solids content of the paint, and tons per year on a 365-day rolling sum basis of VOC and TSP/PM-10 emitted.	Title I Condition: 40 CFR Section 52.21 to remain a non-major source under PSD
Operational Flexibility: The Permittee is not required to vent emissions from the paint spraying and drying operations to CE 002.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/14/99

Facility Name: Louisiana-Pacific Corp - Two Harbors

Permit Number: 07500019 - 001

Subject Item: **EU 002 Thermal Oil Heater #1 (31 MMBtu/hr)**

Associated Items: CE 003 Centrifugal Collector - High Efficiency

CE 004 Fabric Filter - High Temperature, i.e., T>250 Degrees F

SV 003

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input	Minn. R. 7011.0515, subp. 1
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0515, subp. 2
Fuels Allowed: the Permittee shall only combust the following fuels in EU 002: wood waste (which may include material from the blending system, solids from the drying system removed by CE 001, board trim, and wood fiber from press plate cleaning), on-site generated waste (which may include waste latex paint, used oil, cardboard and paper waste, soiled rags, and combustible absorbent materials from oil, anti-freeze, water-based paint, and water or soy based ink spills). Incremental addition of on-site generated waste fuels shall be done such that combustion conditions are not upset.	Minn. R. 7007.0800, subp. 2
Record Keeping: the Permittee shall keep records of the type and quantity of fuel combusted in EU 002.	Minn. R. 7007.0800, subp. 5
Pollution Control Equipment Monitoring and Record Keeping: the Permittee shall monitor and record the pressure drop across the baghouse (CE 004) once each day while in operation. If the pressure drop is outside the proper range (identified to be 1 to 13 inches of water column), take the corrective actions outlined in the O&M plan. Record all corrective actions taken upon completion of the action.	Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5, Minn. R. 7007.0800, subp. 14
Performance Test: due before 07/01/2003 to measure total particulate matter and opacity emissions.	Minn. R. 7017.2020. subp. 1
Performance Test Pre-test Meeting: due 7 days before Performance Test	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/14/99

Facility Name: Louisiana-Pacific Corp - Two Harbors

Permit Number: 07500019 - 001

Subject Item: **EU 003 Thermal Oil Heater #2 (25 MMBtu/hr)**

Associated Items: SV 004

What to do	Why to do it
Fuels Allowed: the Permittee shall only combust natural gas in EU 003.	Minn. R. 7007.0800, subp. 2
Record Keeping: the Permittee shall maintain records of the amount of natural gas combusted in EU 003 each day the unit is operated.	40 CFR Section 60.48c(g)

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/14/99

Facility Name: Louisiana-Pacific Corp - Two Harbors

Permit Number: 07500019 - 001

Subject Item: **EU 004 Board Press**

Associated Items: SV 005

SV 006

What to do	Why to do it
Total Particulate Matter: less than or equal to 7.03 lbs/hour	Title I Condition: 40 CFR Section 52.21 to remain a non-major source
Particulate Matter < 10 micron: less than or equal to 7.03 lbs/hour	Title I Condition: 40 CFR Section 52.21 to remain a non-major source
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Performance Test: due before 07/01/2001 to measure total particulate matter emissions.	Minn. R. 7017.2020. subp. 1
Performance Test Pre-test Meeting: due 7 days before Performance Test	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/14/99

Facility Name: Louisiana-Pacific Corp - Two Harbors

Permit Number: 07500019 - 001

Subject Item: **EU 005 Wood Waste Handling Operations 1**

Associated Items: CE 005 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 007

What to do	Why to do it
Total Particulate Matter: less than or equal to 4.80 lbs/hour	Title I Condition: 40 CFR Section 52.21 to remain a non-major source
Particulate Matter < 10 micron: less than or equal to 4.80 lbs/hour	Title I Condition: 40 CFR Section 52.21 to remain a non-major source
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Pollution Control Equipment Requirements: the Permittee shall maintain operation of the fabric filter associated with the emission units listed above under Associated Items.	Title I Condition: 40 CFR Section 52.21 to remain a non-major source
Visible Emissions Observation: the Permittee shall observe the emissions from SV 007 (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 Section 52.21 to remain a non-major source
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, also record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5
Performance Test: due before 07/01/02 to measure total particulate matter and PM-10 emissions.	Minn. R. 7017.2020. subp. 1
Performance Test Pre-test Meeting: due 7 days before Performance Test	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/14/99

Facility Name: Louisiana-Pacific Corp - Two Harbors

Permit Number: 07500019 - 001

Subject Item: **EU 006 Wood Waste Handling Operations 2**

Associated Items: CE 006 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 008

What to do	Why to do it
Total Particulate Matter: less than or equal to 3.08 lbs/hour	Title I Condition: 40 CFR Section 52.21 to remain a non-major source
Particulate Matter < 10 micron: less than or equal to 3.08 lbs/hour	Title I Condition: 40 CFR Section 52.21 to remain a non-major source
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Pollution Control Equipment Requirements: the Permittee shall maintain operation of the fabric filter associated with the emission units listed above under Associated Items.	Title I Condition: 40 CFR Section 52.21 to remain a non-major source
Visible Emissions Observation: the Permittee shall observe the emissions from SV 008 (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 Section 52.21 to remain a non-major source
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, also record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/14/99

Facility Name: Louisiana-Pacific Corp - Two Harbors

Permit Number: 07500019 - 001

Subject Item: **EU 007 Wood Waste Handling Operations 3**

Associated Items: CE 007 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 009

What to do	Why to do it
Total Particulate Matter: less than or equal to 6.86 lbs/hour	Title I Condition: 40 CFR Section 52.21 to remain a non-major source
Particulate Matter < 10 micron: less than or equal to 6.86 lbs/hour	Title I Condition: 40 CFR Section 52.21 to remain a non-major source
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Pollution Control Equipment Requirements: the Permittee shall maintain operation of the fabric filter associated with the emission units listed above under Associated Items.	Title I Condition: 40 CFR Section 52.21 to remain a non-major source
Visible Emissions Observation: the Permittee shall observe the emissions from SV 009 (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 Section 52.21 to remain a non-major source
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, also record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5

TABLE B: SUBMITTALS

06/14/99

Facility Name: Louisiana-Pacific Corp - Two Harbors

Permit Number: 07500019 - 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

06/14/99

Facility Name: Louisiana-Pacific Corp - Two Harbors

Permit Number: 07500019 - 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 Protocol	due 1,096 days after Permit Issuance for PM-10 and NOx. This protocol will describe the proposed modeling methodology and input data, in accordance with all requirements of 40 CFR pt. 51, Appendix W.	Total Facility
Computer Dispersion Modeling Results	due 1,462 days after Permit Issuance for PM-10 and NOx. To be submitted after the MPCA has reviewed and approved the modeling protocol.	Total Facility
Fugitive Control Plan	due 60 days after Permit Issuance for review and approval. The plan shall identify all fugitive emission sources, primary and contingent control measures, and record keeping. The Permitee shall follow the actions and record keeping specified in the control plan. The plan may be amended by the Permittee with the Agency's approval. If the Agency determines the permitee 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.	Total Facility
Operation and Maintenance Plan	due 60 days after Permit Issuance for review and approval for all air pollution control equipment. Included in the plan should be the manufacturer's recommended operating ranges for parameters such as pressure drop across the system, liquid flow rate, liquid supply pressure, temperature ranges, 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
Performance Test Notification (written)	due 30 days before Performance Test	EU002, EU004, EU005, GP001
Performance Test Plan	due 30 days before Performance Test	EU002, EU004, EU005, GP001
Performance Test Report - Microfiche Copy	due 105 days after Performance Test	EU002, EU004, EU005, GP001
Performance Test Report	due 45 days after Performance Test	EU002
Performance Test Report	due 45 days after Performance Test	EU004
Performance Test Report	due 45 days after Performance Test	EU005
Performance Test Report	due 45 days after Performance Test	GP001

TABLE B: RECURRENT SUBMITTALS

06/14/99

Facility Name: Louisiana-Pacific Corp - Two Harbors

Permit Number: 07500019 - 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 period of each calendar year covers January 1 - June 30. The second report period of each calendar year covers July 1 - December 31. If no deviations have occured, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 30 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. The EPA copy shall be sent to: Mr. George Czerniak, Chief, Air Enforcement and Compliance Assurance Branch, Air and Radiation Division, EPA Region V, 77 West Jackson Boulevard, Chicago, Illinois 60604	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

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 07500019-001

This Technical Support Document (TSD) is for all the interested parties of the permit. The purpose of this document is to set forth the legal and factual basis for the 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 (list both if different)	Facility Address (SIC Code: 2493)
Louisiana-Pacific Corporation, Northeast Division 111 Southwest Fifth Avenue Portland, Oregon 97204 Contact: Ms. Elizabeth Smith, Director of Environmental Affairs (503)221-0800	Louisiana-Pacific Corporation Industrial Park North - Highway 2 Two Harbors, Lake County, Minnesota 55616 Contact: Ms. Barb Hamilton, (218)834-5652

1.2. Description of the facility

The Louisiana-Pacific facility in Two Harbors, Minnesota is an oriented strand board manufacturing facility that produces structural panel used for various construction applications. The facility is identified by the Standard Industrial Classification Code 2493.

The plant purchases small diameter logs that are heated in log conditioning ponds, debarked, and fed to a waferizer. The bark is used as fuel for the thermal oil heater. The waferizer flakes the logs into thin pieces, which are approximately 3 inches long by 1 inch wide by 1/32 inch thick. The freshly cut pieces have a moisture content of approximately 50 percent. The wet flakes go through a rotary dryer which reduces the moisture content to between 4 and 8 percent. The flakes are then captured by the primary cyclone and the exhaust gas passes through a wet electrostatic precipitator followed by a regenerative thermal oxidizer.

The flakes collected by the primary cyclone drop into a rotary screen, which separates the correctly sized flakes for further processing. The material passing through the screen is used as fuel in the dryer. Wax, resin, and fungicide (for siding products) are mixed with the flakes in rotary blenders. Formers then evenly distribute the flakes onto a moving conveyor. A separate former is used to orient the bottom, core, and top layers of the board. The continuous mat of flakes is separated into press size segments by the flying cut-off saw. Paper overlay is applied for siding products.

The loader loads the boards into the press and with the combination of heat (supplied by the thermal oil heater) and pressure, the wafer mats are turned into solid boards. These boards are unloaded and cut by the trim saw to the desired sizes. The dust formed by this process is collected and sold as a byproduct or may be used as fuel in the rotary dryer.

The boards may then be further processed into lap or panel siding. Boards are cut to the desired lap size, edges profiled and sanded, and edge seal and face primer applied. Panel siding is grooved and edge seal applied to the grooves. Finished boards pass through drying ovens. Dust formed by this process is collected and used as fuel in the rotary dryer.

The facility operates several pollution control devices to control emissions. As mentioned previously, the rotary dryer exhaust is controlled by a wet electrostatic precipitator and regenerative thermal oxidizer. Note that the regenerative thermal oxidizer was a requirement stated in a federal Consent Decree issued to Louisiana-Pacific Corporation in 1993. The Consent Decree applied to all LP OSB plants across the country. Emissions generated by the thermal oil heater pass through a cyclone and baghouse. Emissions from the board press are uncontrolled. Particulate emissions from saws, conveyors, internal transfer points, etc., are controlled by a number of baghouses. The emissions generated by the drying ovens are either controlled by the regenerative thermal oxidizer or uncontrolled (it is the option of the company as long as the synthetic minor PM and VOC limits are complied with). The paint spray booth is a three-walled room which exhausts through a fiberglass and fabric filter to plant air.

It is important to note that a Maximum Achievable Control Technology (MACT) standard is scheduled to be issued for this industry type in the year 2000.

1.3 Description of any changes allowed with this permit issuance

This Title V permit is mainly a compilation of all existing rules and permit conditions. However this new operating permit eliminates quite a few requirements found in the previous total facility operating permit and adds several new requirements. The changes are described below.

GP 001 Rotary Wood Wafer Dryer

The requirement to perform weekly Carbon Monoxide (CO) monitoring on the dryer exhaust was eliminated with this Title V permit because the facility has been performing this monitoring for several years and has consistently shown compliance. The monitoring was valuable and served its purpose but is no longer needed.

Periodic monitoring for the pollution control equipment on these emission units was changed. Monitoring to determine whether or not the wet ESP is energized (electric current is being applied to the two T-R sets) will now be performed instead of the monitoring of voltage, current, and spark rate for Particulate Matter (PM) periodic monitoring. Monitoring the combustion chamber temperature of the Regenerative Thermal Oxidizer (RTO) is the periodic monitoring requirement for VOCs and CO. Future stack testing of this unit should be done utilizing (drying) the highest percentage of softwood species possible (in order to achieve worst case conditions since softwoods contain more VOC than hardwood). The requirement to achieve 95 percent control of Volatile Organic Compound (VOC) emissions or meet the 9.04 lb/hour VOC emission limit was reduced to just having to meet the emission limit. The 95 percent control was eliminated because it is sometimes difficult to meet when the inlet concentration is very low. It is felt that the 9.04 lb/hour emission limit along with the requirement to operate and monitor the RTO is all that is needed.

GP 002 Spray Coating/Drying Oven Operations

Previously the painting and drying oven operations were grouped with the rotary wood wafer dryer. This permit has pulled these units out into a separate group. The painting and wood wafer drying continue to normally vent through the same pollution control device (the RTO) but this permit also gives the company the option of not venting the painting emissions to the RTO. The reasons for this include the allowance for operational flexibility and because the plant now mainly uses a very low VOC (water-based) paint that may require more natural gas to be burned in the RTO to destroy the VOCs than it is worth. There is a point where the emissions from the combustion of natural gas in the RTO are greater than the amount of VOC emissions from the painting operation. The plant is being given the option of directly venting the painting emissions when 1) there is no net benefit to oxidation in the RTO or 2) process upsets (i.e. shutdown/breakdown of the RTO) no longer allow for wood wafer drying but painting could continue.

The previous permit had a VOC usage limit of 481.8 tons per year. The basis of this usage limit was never fully understood. The overriding reason for it was to make the plant synthetic minor for VOCs. The VOC usage limit of 100 TPY is discussed below in the section on setting synthetic minor limits for the plant. The group also has an 20 TPY limit on the amount of Total Suspended Particulates (TSP)/Particulate Matter less than 10 microns (PM_{-10}) that can be emitted. The VOC and TSP/PM_{-10} limits apply all the time to those sources that are vented directly to atmosphere (such as EU 030 - EU 034) but do not apply to the various emission units when they are vented to the RTO. Periodic monitoring for VOC and TSP/PM_{-10} consists of daily record keeping of the 365-day rolling sum of each pollutant emitted. Normally EU 008 through EU 029 vent to the RTO and EU 030 through EU 034 vent to atmosphere indirectly through the nearest building vent (e.g. SV 016 associated with the unit spray booth). Thus normal daily record keeping will consist of only VOC and TSP/PM_{-10} emissions from EU 030 through EU 034 and the EU 008 - EU 029 emission rates will be zero since they are all vented to the RTO. On other days when EU 008 - EU 029 are not vented to the RTO there will be emission rate numbers greater than zero.

EU 002 Thermal Oil Heater No. 1 (31 MMBtu/hour)

The CO monitoring mentioned above in the section on the wood wafer dryer was also eliminated for the thermal oil heater. The reasoning is the same as above. The previous permit for this facility has a limit on the amount of wood fuel this source can combust and a limit on the amount of on-site generated waste the facility can burn. Both of these limits were eliminated with this permit. The first limit on the amount of the main fuel (wood waste) that can be burned was eliminated because the plant is kept to its self-imposed synthetic minor limits in other ways (as discussed below). As for the limit on only burning 3 percent on-site generated waste, this limit was eliminated because it was thought to be unnecessary since the waste was limited to on-site generated material and thus off-site material cannot be shipped in. It is felt that the plant cannot generate enough on-site waste to pose a concern for combustion. In addition language was added to the permit that says "Incremental addition of on-site generated waste fuels shall be done such that combustion conditions are not upset". This requirement addresses the point of the 3 percent limit. Overall the goal is to combust this on-site generated waste and to not upset combustion conditions and create higher levels of incomplete combustion products (increase hazardous air pollutant emissions).

The only periodic monitoring required for this source is particulate monitoring (periodic monitoring of pollution control equipment and stack testing). This permit places operating ranges of pollution control equipment in the permit instead of the operation and maintenance plan. This permit refers to the O&M plan as the source of corrective actions to take in case the operating parameter goes outside the normal range listed in the permit..

EU 003 Thermal Oil Heater No. 2 (25 MMBtu/hour)

Consistent with other recent Title V permits approved by the U.S. Environmental Protection Agency (EPA) for Minnesota facilities, the only periodic monitoring for this natural gas-fired only unit, is to keep records of the amount of natural gas combusted. No other fuels are allowed to be combusted nor is the unit capable of burning any other fuels.

This is an NSPS subpart Dc affected unit. The NSPS does not list a particulate matter or opacity emission limit for boilers burning only natural gas. According to our legal staff advice if the NSPS does not have these limits then we do not fall back on the state limits. Thus there are no particulate matter or opacity limits that apply. However the effective allowable PTE from this unit is assumed to be the AP-42 rate plus an added safety factor of 300% which equates to 0.023 lb/MMBtu (AP-42 emission factor equals 0.0000076 lb/cf). The 0.023 lb/MMBtu is the allowable limit used in the synthetic minor total facility calculation as shown in Table 1 in Section 1.5 of this TSD.

EU 004 Board Press

This permit eliminates the process throughput limit on the press. The elimination of the press throughput limit was done because these limits are no longer needed now that the plants operates a VOC oxidizer (RTO) on the wood wafer dryer and because the plant has other limits now that maintain the self-imposed PSD synthetic minor status. The previous permit also had limits for VOC, Nitrogen Oxides (NO_X), and CO. These limits were eliminated in this Title V permit because the limits were simply the potential to emit of the unit and it is normal practice to now not list limits in permits that are just the PTE.

EU 005, EU 006, and EU 007 Wood Waste Handling Operations 1, 2, and 3

This permit changes the particulate periodic monitoring from pressure drop monitoring to observation of visible emissions from the wood waste handling baghouses. This new practice of periodic monitoring for low temperature baghouses is consistent with our approach across the state and with other previously EPA-approved wood products plants Title V permits.

Previously the facility had to perform stack testing of all three baghouses (last test performed in October of 1996). This permit only requires testing at one baghouse per permit term. Thus this 5-year permit only requires testing of wood waste handling system 1 and the next 5-year permit will require testing of either system 2 or 3. The reason for this is that the previous testing showed a wide margin of compliance with the standards. In addition the PM/PM_{-10} limits for each of these sources was doubled with this permit. This was done to provide even more flexibility for the facility. The previous limits were much lower than the state industrial process equipment rule would allow. The new limits are still much lower than the state limit but yet give them more flexibility. The limits were changed to optimize emissions under LP's self-imposed PSD synthetic minor limits (discussed more below).

Wood Waste Source	Old PM/PM_{-10} Limit (lb/hour)	New PM/PM_{-10} Limit (lb/hour)	Recent PM/PM_{-10} Stack Test Value(lb/hr)	% Compliance w/ New Limit
EU 005	2.40	4.80	0.76/1.44	16%/30%
EU 006	1.54	3.08	0.38/0.39	12%/13%
EU 007	3.43	6.86	0.54/1.29	8%./19%

Table B and Misc. Information

Note that with this Title V permit the facility is opting to no longer be permitted to burn fuel oil in the rotary wood wafer dryer or either of the thermal oil heaters.

Table B contains a few new requirements for the facility. These include the submittal of a fugitive dust compliance plan, updating of the operation and maintenance plan for all pollution control equipment, and the requirement to perform ambient computer dispersion modeling for PM_{-10} and NO_X at a specified point after permit issuance.

Synthetic Minor Limitations

Louisiana-Pacific Corporation has opted to make this Title V permit a synthetic minor PSD permit as well. The potential to emit from the plant for PM/PM_{-10}, CO, and VOCs is greater than 250 TPY and thus would be a major PSD source; all other criteria pollutants have a PTE less than 250 TPY and thus they are naturally non-major for the other criteria pollutants. LP is choosing to take limits on PM/PM_{-10}, CO and VOCs to synthetically limit the plant to below the major source threshold (less than 250 TPY).

In terms of CO, the plant has accepted limits on GP 001 (the rotary dryer) which are only met through the operation of the RTO. In terms of VOCs, the plant has accepted limits on GP 001 (the rotary dryer) and GP 002 (painting and paint drying operations). The GP 002 limit of 100 TPY was set based on taking the PTE for VOCs from all the sources at the plant except the painting and seeing how much is left before 250 TPY is exceeded. The total PTE from all the sources minus the painting is 118 TPY and thus the painting can be allowed to emit no more than 131 TPY before the PSD major threshold is triggered. To provide a margin of comfort on this limit the VOC usage from painting was set at 100 TPY.

In terms of the PM/PM_{-10} synthetic minor limitations, the plant has accepted limits on GP 001 (the rotary dryer), GP 002 (painting and paint drying operations), EU 004 (the board press), and all three wood waste handling baghouses (EU 005, EU 006, and EU 007). The state PM limitations found in Minn. R. ch. 7011, apply to these units. The company has opted to accept more restrictive PM limits (on the rotary wood wafer dryer, the spray coating/drying ovens, the board press, and all three wood waste handling operations) in order to avoid classification as a major PSD source. The total PTE from all the sources minus the painting is 194.8 TPY and thus the painting can be allowed to emit no more than 55.2 TPY before the PSD major threshold is triggered. To provide a margin of comfort on this limit (and allow for future modifications) the painting limit was set at 20 TPY by LP. The table found in section 1.5 of this document provides a further depiction of the synthetic minor limitations for PM and VOCs.

1.4 Description of all permits and permit amendments issued to the facility previously

Permit Number and Issuance Date	Action Authorized
1995-84-IO-1 May 18, 1984	Authorization to install and operate a new waferboard siding plant.
1995-87-OT-1 April 22, 1987	Authorization to continue operation of the waferboard siding plant.
1995-92-I/O-1 Jan. 6, 1993	Installation of paint drying ovens
Amd. 1 to 1995-92-I/O-1 April 6, 1993	Amendment to permit for installation of paint drying ovens
07500019-006 (1995-95-OT-1) Oct. 16, 1996	Total facility operating permit incorporating Consent Decree for installation of regenerative thermal oxidizer
Amd. 1 to 07500019-006 Mar. 25, 1997	Replacement of baghouse with larger baghouse and updating of permit to account for thermal oil heater No. 2.
Amd. 2 to 07500019-006 Aug. 7, 1997	Removal of dryer wood fuel limitation

1.5. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary:

EU/ GP #	SV#	Emission Unit Description	PM tpy	PM_{10} tpy	SO_2 tpy	NO_X tpy	CO tpy	VOC tpy	Pb tpy
GP 001	SV 001,	Rotary Wood Wafer Dryer	42.7	42.7	1.6	90.2	133.6	39.6	0.0001
GP 002	SV 001,	Spray Coating/Drying Oven Operations	20.0	20.0	-----	-----	-----	100.0	-----
EU 002	SV 003	Thermal Oil Heater No. 1	54.3	54.3	1.2	52.6	69.2	6.7	-----
EU 003	SV 004	Thermal Oil Heater No. 2	2.5	2.5	0.4	14.6	3.6	0.3	-----
EU 004	SV 005,	Board Press	30.8	30.8	-----	-----	22.3	71.4	-----
EU 005	SV 007	Wood Waste Handling Operations 1	21.0	21.0	-----	-----	-----	-----	-----
EU 006	SV 008	Wood Waste Handling Operations 2	13.5	13.5	-----	-----	-----	-----	-----
EU 007	SV 009	Wood Waste Handling Operations 3	30.0	30.0	-----	-----	-----	-----	-----

	PM tpy	PM_{10} tpy	SO_2 tpy	NO_X tpy	CO tpy	VOC tpy	Pb tpy
Total Facility Limited Potential Emissions*	215	215	3.2	157	229	218	0.0001
Total Facility Actual Emissions (From 1996 Emissions Inventory Report)	43	36	1.7	24	64	33	0.0

*These are the limited potential emissions from column 3 in GI-07 from Delta. They differ from those in the permit application sent by the company in that they have been verified and corrected as need be by MPCA staff. These are the potential emissions that would appear in a public notice..

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}, CO, and VOC	SO_2, NO_x, and Pb
NAAR (list pollutant) **Not Applicable**			
Part 70 Permit Program (list pollutant)	PM_{-10}, VOC, NO_X, 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, GRP, or SV #	Applicable Regulations	Comments:
GP 001	40 CFR § 52.21 (synthetic minor limitations)	Title I Conditions to remain non-major for PSD. Self imposed PM/PM_{-10}, CO and VOC limitations to remain non-major for PSD.
GP 002	Minn. R. 7007.0715, 40 CFR § 52.21 (synthetic minor limitation)	Standards of Performance for Post-1969 Industrial Process Equipment, Title I Conditions to remain non-major for PSD. Self imposed VOC and TSP/PM_{-10} limitations to remain non-major for PSD.
EU002	Minn. R. 7007.0510 Minn. R. 7009.0020	Standards of Performance for New Indirect Heating Equipment

EU 003	40 CFR pt. 60, subp. Dc, Minn. R. 7011.0515	Standards of Performance for Small and Industrial Commercial and Institutional Steam Generating Units, Standards of Performance for New Indirect Heating Equipment
EU 004	40 CFR § 52.21 (synthetic minor limitation)	Title I Conditions to remain non-major for PSD. Self imposed PM limitations to remain non-major for PSD.
EU 005, EU 006, EU 007	40 CFR § 52.21 (synthetic minor limitations)	Title I Conditions to remain non-major for PSD. Self imposed PM limitations to remain non-major for PSD.

3. Technical Information

In addition to the permit, the following additional information is attached to or included as additional sections to the TSD:

- Equipment location/description information
- Emission calculation sheets

4. Conclusion

Based on the information provided by the Louisiana-Pacific Corporation, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 07500019-001, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team:
Brett Ballavance
Cary Hernandez
Bob Beresford and
Stuart Arkley
Paula Connell (peer review)

Attachment: Specified in section 3