

AIR EMISSION PERMIT NO. 03500031- 002

IS ISSUED TO

Weyerhaeuser Company

LEVEL BY WEYERHAEUSER

19586 County Road 102
Ironton, Crow Wing County, MN 56401

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

Permit Type	Application Date	Issue Date	Action #
Total Facility Operating Permit	April 1995	September 26, 2005	001
Major Amendment	February 2006	See Below	002
Administrative Amendment	April 2006		

This permit authorizes the Permittee to operate and construct the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: Federal; Pt 70/Limits to avoid NSR

Issue Date: September 26, 2005

Authorization to Construct and Operate Issuance Date: June 5, 2006

Final Permit Issuance Date: June 22, 2006

Expiration: September 26, 2010
Title I Conditions do not expire.

Richard J. Sandberg, Manager
Air Quality Permits Section
Industrial Division

for Sheryl A. Corrigan
Commissioner
Minnesota Pollution Control Agency

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NOTICE TO THE PERMITTEE:

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

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

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

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

PERMIT SHIELD:

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

FACILITY DESCRIPTION:

Laminated Strand Lumber (LSL) is produced at the iLevel by Weyerhaeuser Deerwood facility, located in Crow Wing County, Minnesota. The LSL is an Engineered Wood Product (EWP) which is made from strands of wood obtained from aspen and other hardwood species which are then bound together with structural resins.

The facility receives hardwood logs and stores them in a logyard. The logs are conditioned in heated water, debarked, and then proceed to one of two redundant processing lines. The logs are cut into strands which are dried in a rotary drum dryer. The strands are metered and screened on each processing line and conveyed to a fully-enclosed blender where liquid Methylene Diphenyl Diisocyanate (MDI) resin and other material such as wax and zinc borate are added to the strands. The coated strands leave the blender and are distributed to the formers, which lay up a

continuous mat of parallel aligned strands. The mat is cut into sections and conveyed to the press. Mats are cured in a hydraulic press which has heated top and bottom. The press compacts the loose mat of strands into a billet. Pressed billets are sawn and sanded to specific lengths and widths by an automated finishing line. Upon finishing, the product is stacked and packaged for shipment.

The major heat source for the processes at the facility is a 225 mmBtu/hr four-cell Wellons furnace. The furnace is fired by bark and wood residuals. One duct from the furnace carries hot gases to a heat exchanger which is used to heat thermal oil; this oil is used for heating the billet press as well as for space heating and for generating steam. Another duct from the furnace carries combustion gases to the two rotary dryers where they are used to dry the wood strands. Additional heat is supplied to the dryers with two 40 mmBtu/hr, fueled by natural gas/wood-dust burners. Additional burners are being added to burn Landfill Gas (LFG). There is also a 40 mmBtu/hr back-up thermal oil heater at the facility.

The facility has emission limits to establish it as a synthetic minor source with regard to federal New Source Review regulations. The facility is a major source of Hazardous Air Pollutant (HAP) emissions.

The pollution control equipment and main pollutants of concern from the emission units at the Facility are as follows: the rotary dryers and Wellons furnace system are sources of Particulate Matter (PM and PM₁₀); Volatile Organic Compounds (VOCs); Carbon Monoxide (CO); and Nitrogen Oxides (NO_x). The particulate emissions in the exhaust stream from the dryers system are controlled by cyclones and Electrified Filter Beds (EFBs). The particulate emissions in the exhaust stream from the Wellons furnace which goes to the thermal oil heater are controlled by multiclones and an electrostatic precipitator. The blending and forming processes are sources of VOCs and HAPs. The billet press is controlled by a superheater, for control of the MDI, and is primarily a source of VOC, but also particulates. The in-plant particulate sources (e.g. the handling, finishing and forming processes) are generally controlled by baghouses. There are also fugitive particulate sources such as bark and fuel piles and paved and unpaved roads.

MAJOR AMENDMENT (PER 002) DESCRIPTION:

This is a major amendment which allows for the construction and use of a pipeline from Crow Wing County Landfill to the facility in order to supply Landfill Gas to be used as an additional fuel for the dryers. This requires the addition of an additional burner in each Dust/Gas Burner to burn LFG only. The anticipated maximum supply of LFG is 16mmBtu/hr from the landfill. Pollutants that will increase with LFG usage are SO₂ and VOCs.

The emission limit for NO_x will remain at 51.3 lb/hr contingent on submittal of a report with modeling and emission rate information to update modified Air Emission Risk Assessment (AERA) conducted as part of Title V issuance. This report was submitted on June 20, 2006.

This amendment will allow the use of 2 or 3 EFBs and will add a limit for the minimum EFB ionizer amperage based on manufacturer's recommendations.

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-1**

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

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

Subject Item: Total Facility

What to do	Why to do it
SOURCE-SPECIFIC REQUIREMENTS	hdr
Comply with Plywood and Composite Wood Product (PCWP) MACT, Subpart DDDD, as applicable.	40 CFR Subpart DDDD
Comply with Industrial Boiler MACT, Subpart DDDDD, as applicable.	40 CFR Subpart DDDDD
Fugitive Emissions Control: The Permittee shall follow the actions and record keeping specified below for control of fugitives. 1. All ash haul trucks containing dry, fine ash shall be covered prior to leaving the facility. 2. The Permittee shall institute a 10 miles/hr speed limit on all of the facility's unpaved roads.	Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0100; Minn. R. 7007.0800, subp. 2; Minn. R. 7011.0150; Minn. R. 7009.0020
Fugitive Emissions Control (continued): 3. The Permittee shall control fugitive emissions from the facility's unpaved roads by one of the following methods: (a) The Permittee shall water all of the facility's unpaved roads once every 24 hrs at an application rate of approximately 0.014 gal/ft ² . If the roads are frozen, if a rainfall or snowfall of 0.25 inch occurs within a 24-hr period, or if the roads are too muddy from ground thawing conditions or extended rainfall to drive on, the Permittee is not required to water for that 24-hr period. (b) The Permittee shall apply a chemical suppressant once every 2 weeks at a volume of 0.06 gal/yd ² . If the roads are frozen, if a rainfall or snowfall of 0.25 inch occurs within a 24-hr period, or if the roads are too muddy from ground thawing conditions or extended rainfall to drive on, the Permittee is not required to add suppressant.	Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0100; Minn. R. 7007.0800, subp. 2; Minn. R. 7011.0150; Minn. R. 7009.0020
Recordkeeping for Fugitive Emissions Control: The Permittee shall maintain a log of the unpaved road watering or chemical application. The log shall note the date, time and duration of each watering or application. The log shall also include a reason why the roads were not watered for each day that they were not. Daily records shall be kept of the weather conditions; this shall include the date, outside temperature, and rainfall in previous 24-hour period. The logs and weather records do not need to be kept during the winter months when the ground is frozen, i.e. December 1 through April 1.	Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0800, subp. 2; Minn. R. 7011.0150
Recordkeeping for Tanks: Maintain records showing the dimensions of the tank and an analysis showing the tank capacity. These records shall be maintained for the life of the source.	40 CFR Section 60.116b(b); Minn. R. 7011.1520(C)
The facility currently uses ozone-depleting substances as defined in 40 CFR pt. 82. Sections 601-618 of the 1990 Clean Air Act Amendments and 40 CFR pt. 82 may apply to your facility. Read Sections 601-618 and 40 CFR pt. 82 to determine all the requirements that apply to your facility.	40 CFR pt. 82
The Permittee shall comply, and upon written request demonstrate compliance, with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080.	40 CFR pt. 50; Minn. Stat. Sec. 116.07, subds. 4a and 9; Minn. R. 7007.0100, subps. 7A, 7L and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4; Minn. R. 7009.0010 - 7009.0080
OPERATIONAL REQUIREMENTS	hdr
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subps. 2 and 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subps. 14 and 16(J)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-2**

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
PERFORMANCE TESTING	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A and/or B. The VOC testing and calculations for the dryer system (GP 001) and the billet press (EU 005) shall be performed in accordance with the guidance in AP-42 Section 10.6.1.3, dated 3/2002. When a performance test for VOC is conducted, a formaldehyde test shall be conducted simultaneously. The results shall be reported on an "as VOC" basis, summing the Method 25 or 25A data (adjusted to a propane mass basis) and the formaldehyde test result.	Minn. R. ch. 7017
Performance Test Notifications and Submittals: Performance Tests are due as outlined in Table A of the permit. Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.	Minn. R. 7017.2018; Minn. R. 7017.2030, subps. 1-4; Minn. R. 7017.2035, subps. 1-2
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit.	Minn. R. 7017.2025
MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A 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.	Minn. R. 7007.0800, subp. 4(D)
RECORDKEEPING	hdr
Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007. 1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007. 0800, subp. 5(B)
REPORTING/SUBMITTALS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-3**

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. The cause of the deviation; 2. The exact dates of the period of the deviation, if the deviation has been corrected; 3. Whether or not the deviation has been corrected; 4. The anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 - 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Emission Inventory Report: Due on or before April 1 of each calendar year following permit issuance. To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 - 7019.3100
Emission Fees: Due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 - 7002.0095
Submit: due 30 days after Permit Issuance with modeling and emission rate information to update modified AERA conducted as part of Title V issuance. The Report shall provide information on risk estimates in a similar manner as was done in the modified AERA.	Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7009.0020; Minn. R. 7007.0100; Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-4**

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

Subject Item: GP 001 Furnace & Dryers**Associated Items:** EU 001 4 Cell Furnace

EU 002 Strand Dryer 1

EU 003 Strand Dryer 2

EU 030 Dust/Gas Burner on Dryer 1

EU 031 Dust/Gas Burner on Dryer 2

EU 035 LFG Burner on Dryer 1

EU 036 LFG Burner on Dryer 2

SV 001

SV 002

SV 003

SV 004

SV 005

What to do	Why to do it
LIMITS	hdr
Total Particulate Matter: less than or equal to 23.1 lbs/hour	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
Particulate Matter < 10 micron: less than or equal to 23.1 lbs/hour	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
Nitrogen Oxides: less than or equal to 51.3 lbs/hour	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
Carbon Monoxide: less than or equal to 53.5 lbs/hour	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
Volatile Organic Compounds: less than or equal to 36 lbs/hour	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
Acrolein: less than or equal to 0.772 lbs/hour . This is a state only requirement and is not enforceable by the EPA Administrator and citizens under the Clean Air Act.	Minn. R. 7007.0800, subp. 2
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(A)(2)
Temperature: less than or equal to 1007 degrees F using 1-Hour Average (dryer inlet temperature). This limit will be amended as specified in Minn. R. 7017.2025, upon completion of each subsequent performance test.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7017.2025, subp. 3
Fuel Usage: less than or equal to 4000 lbs/month using 12-month Rolling Average of on-site generated materials. The on-site generated materials may consist of adsorbent materials saturated with non-hazardous, on- or off-specification oils. The material may also consist of the water/oil/wood waste slurry that is periodically cleaned from the press enclosure and of non-wood residual materials. This is a state only requirement and is not enforceable by the EPA Administrator and citizens under the Clean Air Act.	Minn. R. 7007.0800, subp. 2
Fuel Usage: limited to landfill gas, natural gas and hog fuel (bark, wood, trims and dust collected from baghouses), and on-site generated adsorbent materials as defined and limited above.	Minn. R. 7007.0800, subp. 2
Fuel Usage: less than or equal to 23955 lbs/hour using 12-hour Average (this fuel usage limit applies to solid fuel); divide total weight of fuel by total operating time in each 12-hour block. Down time of 15 or more minutes is not to be included as operating time. This limit will be amended as specified in Minn. R. 7017.2025, upon completion of each subsequent performance test.	Minn. R. 7017.2025, subp. 3a
RECORDKEEPING	hdr

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

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

<p>Daily Recordkeeping: At least once each 12-hour discrete block of each day of operation, the Permittee shall record the total quantity of oven-dried strands produced in the dryer system, the total quantity of natural gas and landfill gas used in the dryers, and the total quantity of wood residuals combusted in the furnace and dryers. This shall be based on production records and fuel usage records. The Permittee, on each day of operation, shall then calculate and record the 12-hour block average for each of the 12-hour blocks of the previous day, for fuel usage and for strand production.</p> <p>At least once each day of each day of operation, the Permittee shall calculate, record, and maintain records of, the total weight of the on-site generated materials added to the furnace fuel stream.</p>	Minn. R. 7007.0800, subps. 4 and 5
<p>Monthly Recordkeeping: By the 15th day of each month, the Permittee shall calculate and record the monthly total and 12-month rolling average of on-site generated material burned in the furnace for the previous month.</p>	Minn. R. 7007.0800, subps. 4 and 5
PERFORMANCE TESTING	hdr
Performance Test: due before end of each year following Initial Performance Test to measure emissions of Particulate Matter less than 10 microns and Carbon Monoxide.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months following Initial Performance Test to measure emissions of Total Particulate Matter, Nitrogen Oxides, and Volatile Organic Compounds.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months following Initial Performance Test to measure Opacity and emissions of Acrolein. Testing for Acrolein is a state only requirement and is not enforceable by the EPA Administrator and citizens under the Clean Air Act.	Minn. R. 7007.0800, subp. 2; Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-6**

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

Subject Item: GP 002 Systems controlled by baghouses**Associated Items:** CE 008 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

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

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

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

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

CE 013 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 016 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 025 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 006

SV 007

SV 010

SV 011

SV 012

What to do	Why to do it
LIMITS	hdr
Total Particulate Matter: less than or equal to 0.007 grains/dry standard cubic foot . This limit applies separately to each stack. This is more stringent than limit in Minn. R. 7011.0715, subp. 1(A), which also applies to each individual emission unit.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
Particulate Matter < 10 micron: less than or equal to 0.007 grains/dry standard cubic foot . This limit applies separately to each baghouse/stack.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
MONITORING	hdr
Visible Emissions: The Permittee shall check the fabric filter stacks (SV 006, 007, 010, 011, and 012) for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation.	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 and 5
Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in the O&M Plan.	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 and 5
CONTROL EQUIPMENT	hdr
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 99 percent control efficiency	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation.	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000; to avoid classification as a major source under 40 CFR Section 70.2; Minn. R. 7007.0800, subps. 2 and 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-7**

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

<p>Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur:</p> <ul style="list-style-type: none"> - Visible emissions are observed; - The recorded pressure drop is outside the normal operating range specified in the O&M Plan; or - The fabric filter or any of its components are found during the inspections to need repair. <p>Corrective actions shall return the pressure drop to within the normal operating range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.</p>	Minn. R. 7007.0800, subps. 4, 5, and 14
<p>Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.</p>	Minn. R. 7007.0800, subp. 4
<p>Periodic Inspections: At least once per calendar quarter, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.</p>	Minn. R. 7007.0800, subps. 4, 5 and 14
<p>The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.</p>	Minn. R. 7007.0800, subp. 14
PERFORMANCE TESTING	hdr
<p>Performance Test: due before end of each 36 months following Initial Performance Test to measure Total Particulate Matter, Particulate Matter less than 10 microns, and Opacity. The Permittee shall select two representative stacks for testing which shall be different than the two selected for the most recent performance test.</p>	Minn. R. 7017.2020, subp. 1

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

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

Subject Item: GP 003 EFB Requirements**Associated Items:** CE 002 Electrified Filter Bed

CE 005 Electrified Filter Bed

CE 006 Electrified Filter Bed

What to do	Why to do it
The Permittee shall operate and maintain a minimum of 2 of the electrified filter beds any time that any process equipment controlled by the electrified filter bed is in operation.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Total Particulate Matter and Particulate Matter < 10 micron: greater than or equal to 80 percent control efficiency	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000
EFB Bed Voltage: Greater than or equal to 10 kV, unless a new minimum is required to be set pursuant to Minn. R. 7017.2025, subp. 3. If a new minimum is required to be set it will be based on the bed voltage recorded during the most recent MPCA-approved performance test where compliance for PM and/or PM10 was demonstrated. If the EFB bed voltage falls below the minimum, this shall be reported as a deviation.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
EFB Ionizer Amperage: Greater than or equal to 2 mA, unless a new minimum is required to be set pursuant to Minn. R. 7017.2025, subp. 3. If a new minimum is required to be set it will be based on the ionizer voltage recorded during the most recent MPCA-approved performance test where compliance for PM and/or PM10 was demonstrated. If the EFB ionizer amperage falls below the minimum, this shall be reported as a deviation.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
EFB Ionizer Voltage: Greater than or equal to 20 kV, unless a new minimum is required to be set pursuant to Minn. R. 7017.2025, subp. 3. If a new minimum is required to be set it will be based on the ionizer voltage recorded during the most recent MPCA-approved performance test where compliance for PM and/or PM10 was demonstrated. If the EFB ionizer voltage falls below the minimum, this shall be reported as a deviation.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
EFB Pressure Drop: Greater than or equal to 1.0 inches water column, unless a new minimum is required to be set pursuant to Minn. R. 7017.2025, subp. 3. If a new minimum is required to be set it will be based on the pressure drop recorded during the most recent MPCA-approved performance test where compliance for PM and/or PM10 was demonstrated. If the EFB pressure drop falls below the minimum, this shall be reported as a deviation.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
Recordkeeping: Once each day while in operation, the Permittee shall monitor and record the EFB bed voltage, ionizer voltage, and pressure drop for each EFB in operation. The Permittee shall record the time and date of each reading and whether or not the recorded measurement was within the range specified in this permit.	Title I Condition: To avoid classification as a major source under 40 CFR 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 and 5
Quarterly Inspections: At least once per calendar quarter, or more frequently if required by the manufacturer specifications, the Permittee shall inspect the control equipment internal and external system components. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subps. 4, 5, and 14
Corrective Actions: If the monitored parameters are outside the ranges specified by this permit or if the EFB or any of its components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall return the monitored parameters to within the permitted range and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the EFB. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subps. 4, 5, and 14
The Permittee shall operate and maintain the EFB in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-9**

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

Subject Item: GP 004 Dryer Testing w/ Landfill Gas**Associated Items:** EU 002 Strand Dryer 1

EU 003 Strand Dryer 2

SV 002

SV 003

SV 004

SV 005

What to do	Why to do it
Initial Performance Test: due 380 days after Permit Issuance to measure emissions of Total Particulate Matter.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 380 days after Permit Issuance to measure emissions of Particulate Matter less than 10 microns.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 380 days after Permit Issuance to measure emissions of Nitrogen Oxides.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 380 days after Permit Issuance to measure emissions of Volatile Organic Compounds.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 380 days after Permit Issuance to measure emissions of Carbon Monoxide.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 380 days after Permit Issuance to measure emissions of Acrolein. Testing for Acrolein is a state only requirement and is not enforceable by the EPA Administrator and citizens under the Clean Air Act.	Minn. R. 7007.0800, subp. 2; Minn. R. 7017.2020, subp. 1

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

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

Subject Item: SV 009**Associated Items:** EU 024 Pre-Trim

EU 025 Billet Cooler

What to do	Why to do it
LIMITS	hdr
Total Particulate Matter: less than or equal to 0.005 grains/dry standard cubic foot This is more stringent than limit in Minn. R. 7011.0715, subp. 1(A), which also applies.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
Particulate Matter < 10 micron: less than or equal to 0.005 grains/dry standard cubic foot	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Acrolein: less than or equal to 0.013 lbs/hour . This is a state only requirement and is not enforceable by the EPA Administrator and citizens under the Clean Air Act.	Minn. R. 7007.0800, subp. 2
MONITORING	hdr
Visible Emissions: The Permittee shall check the fabric filter stack (SV 009) for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation.	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 and 5
Recordkeeping of Visible Emissions and Pressure Drop. The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit.	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 and 5
PERFORMANCE TESTING	hdr
Performance Test: due before end of each 60 months following Initial Performance Test to measure Total Particulate Matter, Particulate Matter less than 10 microns.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months following Initial Performance Test to measure Opacity.	Minn. R. 7011.0715, subp 1(B); Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-11**

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

Subject Item: EU 001 4 Cell Furnace**Associated Items:** CE 018 Electrostatic Precipitator - Medium Efficiency

CE 019 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones

CE 020 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones

GP 001 Furnace & Dryers

SV 001

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.10 lbs/million Btu heat input . This emission limit does not apply during periods of startup, shutdown, or malfunction.	40 CFR Section 60.43b(c)(1); Minn. R. 7011.0565
Opacity: less than or equal to 20 percent opacity , except for one 6-minute period per hour of not more than 27 percent opacity. This limit does not apply during periods of startup, shutdown, or malfunction.	40 CFR Section 60.43b(f); Minn. R. 7011.0565
The owner or operator shall install, calibrate, maintain, and operate a COMS for measuring the opacity of emissions discharged to the atmosphere, and record the output of the system.	40 CFR Section 60.48b(a); Minn. R. 7011.0565
See requirements for opacity monitor under Subject Item CM 001. See requirements for the ESP under CE 018.	hdr
Performance Test: due before end of each 36 months following Initial Performance Test to measure emissions of Total Particulate Matter.	Monitoring for NSPS limit (40 CFR Section 60.43b); Minn. R. 7017.2020, subp. 1

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-12**

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

Subject Item: EU 005 Billet Press**Associated Items:** CE 007 Other

SV 008

What to do	Why to do it
Total Particulate Matter: less than or equal to 8.32 lbs/hour . This limit is more stringent than limit in Minn. R. 7011.0715, subp. 1(A) which also applies.	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800
Particulate Matter < 10 micron: less than or equal to 8.32 lbs/hour	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Volatile Organic Compounds: less than or equal to 14.6 lbs/hour	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800
Methylene diphenyl diisocyanate: less than or equal to 0.27 lbs/hour . This is a state only requirement and is not enforceable by the EPA Administrator and citizens under the Clean Air Act.	Minn. R. 7007.0800, subp. 2
Acrolein: less than or equal to 0.013 lbs/hour . This is a state only requirement and is not enforceable by the EPA Administrator and citizens under the Clean Air Act.	Minn. R. 7007.0800, subp. 2
Temperature: greater than or equal to 200 degrees F (Superheater Outlet Temperature). This is a state only requirement and is not enforceable by the EPA Administrator and citizens under the Clean Air Act.	Minn. R. 7007.0800, subp. 2
Performance Test: due before end of each 36 months following Initial Performance Test to measure Particulate Matter, Particulate Matter less than 10 microns, and Volatile Organic Compounds emissions.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 36 months following Initial Performance Test to measure MDI emissions.	Minn. R. 7007.0800, subp. 2; Minn. R. 7017.2020, subp. 1
The Permittee shall maintain and operate a thermocouple monitoring device that continuously indicates and records the superheater outlet gas temperature. The monitoring device shall be located immediately downstream of the superheater. The monitoring device shall have a margin of error less than the greater of +/- 0.75 percent of the temperature being measured or +/- 2.5 degrees Celsius.	Minn. R. 7007.0800, subps. 4 and 5
The Permittee shall maintain either a continuous hard copy readout of the superheater outlet temperature, or maintain a hard copy of manual readings taken at least once every hour.	Minn. R. 7007.0800, subps. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-13**

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

Subject Item: EU 032 Back-up Thermal Oil Heater**Associated Items:** SV 015

What to do	Why to do it
Fuel Usage: Limited to natural gas.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000
Recordkeeping: Record and maintain records of the amounts of each fuel combusted on a monthly basis. These records may consist of purchase records or receipts.	40 CFR Section 60.13(i) and February 20, 1992, EPA memorandum to meet the requirements of 40 CFR Section 60.48c(g) and (i)
Natural Gas Fuel Usage: less than or equal to 210 million cubic feet/year using 12-month Rolling Sum	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21; Minn. R. 7007.3000
Daily Recordkeeping. On each day of operation, the Permittee shall calculate, record, and maintain the total quantity of the natural gas usage in EU 032. This shall be based on flowmeters or delivery records.	Title I Condition: To avoid classification as major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 and 5
Monthly Recordkeeping -- Natural Gas Fuel Usage. By the 15th of the month, the Permittee shall calculate and record the following: 1) The total usage of natural gas for the previous calendar month using the daily usage records. 2) The 12-month rolling sum natural gas fuel usage for the previous 12 month period by summing the monthly natural gas fuel usage data for the previous 12 months.	Minn. R. 7007.0800, subps. 4 and 5

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

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

Subject Item: CE 018 Electrostatic Precipitator - Medium Efficiency**Associated Items:** EU 001 4 Cell Furnace

EU 004 Thermal Oil Heaters

What to do	Why to do it
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Total Particulate Matter and Particulate Matter < 10 micron: greater than or equal to 80 percent control efficiency	Title I Condition: To avoid classification as a major source and modification under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.3000
Number of Fields On-line: Greater than or equal to 2, unless a new minimum is required to be set pursuant to Minn. R. 7017.2025, subp. 3. If a new minimum is required to be set it will be based on the number of fields on-line recorded during the most recent MPCA approved performance test where compliance for PM and/or PM10 emissions was demonstrated. If the number of fields drops below the minimum required anytime that process gases are going through the control equipment, this shall be reported as a deviation.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 2 and 14
The Permittee shall operate and maintain the electrostatic precipitator any time that any process equipment controlled by the electrostatic precipitator is in operation.	Title I Condition: To avoid classification as a major source under 40 CFR Section 52.21; Minn. R. 7007.3000
Daily Monitoring: The Permittee shall physically verify and record the number of fields on-line at least once during each operating day of operation. The Permittee shall maintain a written record of the daily verifications.	Minn. R. 7007.0800, subps. 4 and 5
Quarterly Inspections: At least once per calendar quarter, or more frequently if required by the manufacturer specifications, the Permittee shall inspect the control equipment internal and external system components. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subps. 4, 5, and 14
Corrective Actions: If the number of fields on-line is below the minimum specified by this permit or if the electrostatic precipitator or any of its components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall return the number of fields on-line to at least the permitted minimum and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the electrostatic precipitator. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subps. 4, 5, and 14
The Permittee shall operate and maintain the electrostatic precipitator in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14

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

06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

Subject Item: CM 001 Thermal Oil Heater: 20% Opacity, SV001, 6-min ave.**Associated Items:** DA 001

MR 001 Thermal Oil Heater

What to do	Why to do it
Emissions Monitoring: The owner or operator shall use a COMS to measure opacity emissions from EU 001.	40 CFR Section 60.48b(a); Minn. R. 7017.1006
Continuous Operation: COMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A COMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	40 CFR Section 60.13(e); Minn. R. 7017.1090, subp. 1
COMS Daily Calibration Drift (CD) Check: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) opacity at least once daily according to the requirements of 40 CFR Section 60.13(d)(2). The span value shall be between 60 and 80 percent.	40 CFR Section 60.13(d); 40 CFR Section 60.48b(e)(1); Minn. R. 7017.1210, subp. 2
COMS Calibration Error Audit: due before end of each calendar half-year following Permit Issuance. Conduct three point calibration error audits at least 3 months apart but no greater than 8 months apart. Conduct audits in accordance with Minn. R. 7017.1210, subp. 3.	Minn. R. 7017.1210, subp. 3
COMS Calibration Error Audit Results Summary: due 30 days after end of the calendar quarter in which the COMS Calibration Error Audit was completed.	Minn. R. 7017.1220
Attenuator Calibration: The Permittee shall perform an attenuator calibration in accordance with Minn. R. 7017.1210, subp. 4.	Minn. R. 7017.1210, subp. 4
All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data for each successive 6-minute period.	40 CFR Section 60.13(e)(1); 40 CFR Section 60.13(h); Minn. R. 7017.1200, subps. 1, 2 and 3
Recordkeeping: The owner or operator must retain records of all COMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7017.1130
QA Plan Required: Develop and implement a written quality assurance plan which covers each COMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain the written procedures listed in Minn. R. 7017.1210, subp. 1.	Minn. R. 7017.1210

TABLE B: SUBMITTALS

B-1 06/22/06

Facility Name: iLevel by Weyerhaeuser
Permit Number: 03500031 - 002

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:

AQ Permit Technical Advisor
Industrial 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:

AQ Compliance Tracking Coordinator
Industrial 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**B-2** 06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

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 1096 days after 09/26/2005 . Submit modeling data as specified in MPCA guidance for Modeling Information Requests for PM10 and NOx. 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

TABLE B: RECURRENT SUBMITTALS**B-3** 06/22/06

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031 - 002

What to send	When to send	Portion of Facility Affected
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter starting 09/26/2005 (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of monitor bypass and all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions.	CM001
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 09/26/2005 . 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 starting 09/26/2005 (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

APPENDIX B

Insignificant Activities and Applicable Requirements

Facility Name: iLevel by Weyerhaeuser

Permit Number: 03500031-002

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

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

Minn. R. 7007.1300, subp.	Rule Description of the Activity	General Applicable Requirement
3(J)	Fugitive emissions from roads and parking lots.	Minn. R. 7011.0105 (opacity)
4(B)	Emission units with potential emissions of less than 2.28 lb/hr or actual emissions of less than 1.0 lb/hr of PM, PM ₁₀ , NO _x , SO ₂ , and VOCs. <i>Emission units that iLevel has that qualify under this subpart include:</i> <ul style="list-style-type: none">• <i>Emergency generator</i>• <i>Emergency fire pump</i>• <i>Resin tanks 1-4</i>• <i>Resin tank loading and storage system</i>• <i>Roll coating ink</i>• <i>Release agent</i>• <i>Short strand bin vent</i>• <i>Short strand stockpile (unloading to pile)</i>• <i>Short strand stockpile (wind erosion)</i>• <i>Short strand recovery feeder</i>	Minn. R. 7011.0715 (PM and opacity)
Minn. R. 7008.4110	Equipment venting PM/PM ₁₀ inside a building, provided that emissions from the equipment are filtered through an air cleaning system and vented inside of the building 100% of the time. <i>iLevel has a dust filter in the specialty finishing area.</i>	Minn. R. 7011.0715 (PM and opacity)

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 03500031-002

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

1. General Information

1.1. Applicant and Stationary Source Location:

Stationary Source/Address (SIC Code: 2493)	Mailing Address
19586 County Road 102 Ironton, Crow Wing County	P. O. Box 460 Ironton, MN 56444
Corporate/Company Owner: Weyerhaeuser Company P.O. Box 9777 Federal Way, WA 98063-9777	Contact: Jason Lindquist Phone: (218) 546-2002

1.2. Description of the Permit Action

Laminated Strand Lumber (LSL) is produced at the iLevel by Weyerhaeuser Deerwood facility, located in Crow Wing County, Minnesota. The LSL is an Engineered Wood Product (EWP) which is made from strands of wood obtained from aspen and other hardwood species which are then bound together with structural resins.

The facility receives hardwood logs and stores them in a logyard. The logs are conditioned in heated water, debarked, and then proceed to one of two redundant processing lines. The logs are cut into strands by rotating knives. The strands are then stored in green bins and screened to remove fine material, and then dried in a rotary drum dryer. After drying the strands are stored in dry storage bins.

Strands from the dry bins are metered and screened on each processing line and conveyed to a fully-enclosed blender where liquid Methylene Diphenyl Diisocyanate (MDI) resin and other material such as wax and zinc borate are added to the strands. The coated strands leave the blender and are distributed to the formers, which lay up a continuous mat of parallel aligned strands. The mat is cut into sections and conveyed to the press. Mats are cured in a single-opening, hydraulic press which has heated top and bottom plates that are fitted with steam-injection ports. The press compacts the loose mat of strands into a billet. Pressed billets are sawn and sanded to specific lengths and widths by an automated finishing line. Upon finishing, the product is stacked and packaged for shipment.

The major heat source for the processes at the facility is a 225 mmBtu/hr four-cell Wellons furnace. The furnace is fired by bark and wood residuals. One duct from the furnace carries hot gases to a heat exchanger which is used to heat thermal oil; this oil is used for heating the billet press as well as for space heating. Another duct from the furnace carries combustion gases to the two rotary dryers where they are used to dry the wood strands. Additional heat is supplied to the dryers with two 40 mmBtu/hr, fueled by natural gas/wood-dust burners. Additional burners are being added to burn Landfill Gas (LFG). The anticipated supply of LFG is 16 mmBTU/hr. There is also a 40 mmBtu/hr back-up thermal oil heater at the facility.

The facility has emission limits to establish it as a synthetic minor source with regard to federal New Source Review regulations. The facility is a major source of Hazardous Air Pollutant (HAP) emissions.

The pollution control equipment and main pollutants of concern from the emission units at the Facility are as follows: the rotary dryers and Wellons furnace system are sources of Particulate Matter (PM and PM₁₀); Volatile Organic Compounds (VOCs); Carbon Monoxide (CO); and Nitrogen Oxides (NO_x). The particulate emissions in the exhaust stream from the dryers system are controlled by cyclones and Electrified Filter Beds (EFBs). The particulate emissions in the exhaust stream from the Wellons furnace which goes to the thermal oil heater are controlled by multiclones and an ESP. The blending and forming processes are sources of VOCs and HAPs. The billet press is controlled by a superheater, for control of the MDI, and is primarily a source of VOC, but also particulates. The in-plant particulate sources (e.g. the handling, finishing and forming processes) are generally controlled by baghouses. There are also fugitive particulate sources such as bark and fuel piles and paved and unpaved roads.

1.3 Description of the Activities Allowed by this Permit Action

This is a major amendment which allows for the construction and use of a pipeline from Crow Wing County Landfill to the facility to supply LFG to be used as an additional fuel for the dryers. This requires an additional burner in each Dust/Gas Burner to burn LFG only. Pollutants that will increase with LFG usage are SO₂ and VOCs. This also includes an administrative amendment to change the facility name from Trus Joist – A Weyerhaeuser Business to iLevel by Weyerhaeuser.

The emission limit for NO_x will remain at 51.3 lb/hr contingent on submittal of a report with modeling and emission rate information to update modified Air Emission Risk Assessment (AERA) conducted as part of Title V issuance. This report was submitted on June 20, 2006.

This amendment will allow the use of 2 or 3 EFBs and will add a limit for the minimum EFB ionizer amperage based on manufacturer's recommendations.

1.4 Permit History

Permit Number and Issuance Date	Action Authorized
03500031-001 (9/26/05)	Part 70 Total Facility Permit issuance
Stipulation Agreement (6/9/03)	The stipulation agreement addressed Notice of Noncompliance (NON) issued for failed performance testing for (addresses NOV's – 10/18/04, ??)
Letter (5/8/02)	Notice of Compliance for performance test; established operational limits
03500031-010 (Amendment No. 8 to 2309-90-OT-1) (1/27/2000)	Allows dryer to be operated at higher temperature Temperature was increased from 900 °F to 1050 °F; testing required after permit issuance for PM, PM ₁₀ , NO _x , CO, VOCs, Formaldehyde, Acrolein
03500031-009 (Amendment No. 7 to 2309-90-OT-1) (11/3/97)	Allows portion of the dryer exhaust gas to be routed to the thermal oil heater, combines emission limits on the dryer and thermal oil heater stacks into a set of single limits, increased CO emission limit for combined dryer and thermal oil heater, makes changes related to testing, monitoring and reporting requirements, corrects an applicability error associated with burning oil-soaked sorbents made in Amendment No. 6
NON (Notice of Noncompliance) (7/22/97)	Notice of Noncompliance for performance test; test results for CO for thermal oil heater were higher than limit
03500031-008 (Amendment No. 6 to 2309-90-OT-1) (12/23/95)	Installation and operation of natural gas burner for auxiliary plant heat, changes emission limits of several emission points, allows for operational flexibility of which baghouses serve which pieces of equipment, allows on-site generated waste oil and rags to be burned in the thermal oil heater, specifies NSPS requirements for the thermal oil heater and the MDI storage tanks, allows alternative wood species to be burned, establishes new emission testing deadlines, changes acrolein emission limit
1995	Air Toxics Review update
Amendment No. 5 to 2309-90-OT-1 (7/20/95)	Corrected typographical error of the MDI emission limit
Amendment No. 4 to 2309-90-OT-1 (9/23/93)	Allowed installation and operation of a pneumatic transfer system, installation and operation of the dryer EFB baghouse in a new location, changed particulate emission limits of several emission points
Amendment No. 3 to 2309-90-OT-1 (6/7/93)	Allowed use of zinc borate hydrate
Report (3/23/93)	Evaluation of Airborne MDA and MDI at Trus Joist MacMillan
Amendment No. 2 to 2309-90-OT-1 (8/14/92)	Change in ownership Allowed Permittee to add use of borax powder in the process
Amendment No. 1 to 2309-90-OT-1 (7/23/91)	Minor changes in design specifications
2309-90-OT-1 (1/23/90)	Permit for construction and operation of Aligned Fiberboard Plant
Board Meeting (1/23/90)	Request for issuance of permit for facility Public meeting held on November 1, 1989 Comments were received during comment period

1.5 Facility Emissions:

Table 1. Title I Emissions Increase Summary

Pollutant	Emissions Increase from the Modification (tpy)	Limited Emissions Increase from the Modification (tpy)	Net Emissions Increase (tpy)	PSD/112(g) Significant Thresholds for minor sources (tpy)	NSR/112(g) Review Required? (Yes or No)
PM	0.02	0.02	N/A	250	No
PM ₁₀	0.02	0.02	N/A	250	No
NO _x	2.3	2.3	N/A	250	No
SO ₂	11.3	11.3	N/A	250	No
CO	0.4	0.4	N/A	250	No
Ozone (VOC)	24.3	24.3	N/A	250	No
Lead	0	0	N/A	250	No
Total HAPs	9.3	9.3	N/A	10/25	No

Table 2. Non-Title I Emissions Increase Summary

Major amendment required due to a Title I condition change, therefore table not provided.

Table 3. Total Facility Potential to Emit Summary

	PM (tpy)	PM₁₀ (tpy)	SO₂ (tpy)	NO_x (tpy)	CO (tpy)	VOC (tpy)	All HAPs (tpy)
Total Facility Limited Potential Emissions	218	218	25	238	243	228	109
Total Facility Actual Emissions (2004)	125	57	11	119	164	3.8	HAPs not reported in emission inventory

Total Facility PTE remains unchanged due to the potential emissions increase being subject to an emission unit with a pre-existing limit that will remain unchanged.

Table 4. Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD		PM, PM ₁₀ , NO _x , CO, VOC	SO ₂
Part 70 Permit Program	PM ₁₀ , NO _x , CO, VOC		SO ₂
Part 63 NESHAP	X		

2. Regulatory and/or Statutory Basis

New Source Review

The facility has limits to keep it a synthetic minor source under New Source Review (NSR) regulations. No changes are authorized by this permit that would affect this status.

Part 70 Permit Program

The facility is a major source under the Part 70 permit program.

New Source Performance Standards (NSPS)

There are three New Source Performance Standards applicable to the operations at this facility.

- Subpart Db – Furnace (EU 001) installed 1990
- Subpart Dc – Back-up Thermal Oil Heater (EU 032) – installed 1996
- Subpart Kb – Tanks TK 001 through TK 004

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility is likely subject to two NESHAPs. The two standards which apply to the facility are:

- 40 CFR pt. 63, Subp. DDDDD Industrial/Commercial/Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutants
- 40 CFR pt. 63, Subp. DDDD Plywood and Composite Wood Products (PCWP) Manufacture National Emission Standards for Hazardous Air Pollutants

The Industrial Boiler NESHAP was published in the federal register on September 14, 2004. The compliance date for this standard is September 14, 2007. The PCWP NESHAP was published on July 30, 2004; the compliance date for this standard is October 1, 2008. The initial notification for both of these standards has been submitted.

Minnesota State Rules

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

- Minn. R. 7011.0610 Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment
- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment
- Minn. R. 7011.2300 Standards of Performance for Stationary Internal Combustion Engines

Table 5. Regulatory Overview of Units Affected by the Modification/Permit Amendment

Unit	Applicable Regulations	Comments
Total Facility	40 CFR pt. 50; Minn. R. 7009.0010 to 7009.0080	Added NAAQS requirement
GP 001 Furnace and Dryers	Minn. R. 7007.0800, subps. 2, 4, and 5	Added LFG as allowable fuel and added as daily recordkeeping requirement
	Minn. R. 7007.0800, subps. 2 and 14	NO _x emissions limit stays at 51.3 lb/hr
	Minn. R. 7007.0800, subp. 2	Increased maximum allowable fuel usage to 23955 lb/hr
	N/A	Added EU 035, EU 036, SV 003, and SV 005 to GP 001
	N/A	Removed Throughput Limit
GP 002 Baghouses	N/A	Added CE 016 and CE 025 to GP 002
GP 003 Electronic Filter Beds (EFB)	Minn. R. 7007.0800, subps. 2 and 14; Minn. R. 7017.2025, subp. 3	Minimum ionizer amperage based on compliance demonstrated at testing conditions
	40 CFR § 52.21	Decreased minimum number of EFBs in operation at any time to 2
GP 004 Dryer Testing w/ Landfill Gas	GP 004 created for purpose of an initial performance test on the dryers after LFG has been installed and incorporated into the process. Anticipated startup date is Jan. 1, 2007, requested time to work out all the glitches and test in April or May 07. 380 days from anticipated permit issuance is June 1, 2007.	
	Minn. R. 7007.0800, subp. 2; Minn. R. 7017.2020, subp. 1	Separate initial performance tests for PM, PM ₁₀ , NO _x , VOCs, CO, and Acrolein listed for delta tracking purposes
SV 009	N/A	Moved CE 025 requirements to GP 002
EU 001	N/A	Removed reference to EFBs
CE 018 Electrostatic Precipitator	Minn. R. 7007.0800, subps. 2 and 14	Increased minimum number of ESPs in operation at any time to 2

3. Technical Information

3.1 Emissions Increase Analysis

Attachment 1 to this TSD contains the emissions increase calculations for this modification. This demonstrates that this modification is not a major modification for PSD. Emission Factors were obtained from AP-42 (Table A). Sample calculations used to complete Table A and Table B are shown below.

$$EF \text{ (lb/MM Btu)} = \text{Concentration (ppmv)} \times MW \text{ (g/mol)} \times A \times 101325 \text{ (N/m}^2\text{)} / (8.314 \text{ (Nm/mol.K)} \times 298 \text{ (K)} \times 454 \text{ (g/lb)} \times 35.315 \text{ (cf/m}^3\text{)} \times 509.5 \text{ (Btu/cf)})$$

A: as defined in Table B [6]

$$\begin{aligned} EF \text{ (HCl)} &= (42.0)(35.5)(36.5/35.5)(101325) / ((8.314)(298)(454)(35.315)(509.5)) \\ &= 0.00767 \text{ (lb/MM Btu)} \end{aligned}$$

VOC emissions:

$$\begin{aligned} \text{Max Uncontrolled Emissions} &= (16 \text{ MM Btu/hr})(17.3 \text{ lb/MM Btu}) \\ &= 276.1 \text{ lb/hr (8760 hr/yr)} / (2000 \text{ lb/ton}) \\ &= 129.5 \text{ ton/yr} \\ \text{Max Controlled Emissions} &= (276.1 \text{ lb/hr})((100-98)/100) \\ &= 5.5 \text{ lb/hr (8760 hr/yr)} / (2000 \text{ lb/ton}) \\ &= 24.2 \text{ ton/yr} \end{aligned}$$

3.2 Air Toxics

iLevel by Weyerhaeuser submitted the Air Toxics Review Update in September 2003. The MPCA then completed an AERA. The conclusion was to allow iLevel to adopt higher acrolein limits and to encourage the company to move towards modifications required to meet MACT standards in October of 2008.

3.3 Periodic Monitoring

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

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

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

Table 6 summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement are different or new from the previous permit. All other monitoring requirements are still applicable.

Table 6. Periodic Monitoring

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
GP 001 Furnace and Dryers	Added LFG as additional fuel	Recordkeeping	Changed daily recordkeeping to track fuel usage of hog fuel in furnace; natural gas and LFG in dryers
GP 003	Ionizer Amperage: ≥ 2 mA	Recordkeeping of ionizer amperage for EFBs	Changed to say to keep records for each EFB in operation and compare to appropriate limits
CE 018 Electrostatic Precipitator	ESP: ≥ 2 fields on-line	Monitoring of number of fields on-line, recordkeeping, O & M, inspections	New minimum for number of fields online

3.4 Insignificant Activities

iLevel by Weyerhaeuser has several operations which are classified as insignificant activities. These are listed in Appendix B to the permit.

3.5 Permit Organization

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

3.6 Comments Received

Public Notice Period: May 4, 2006 – June 2, 2006

EPA 45-day Review Period: May 4, 2006 – June 19, 2006

No comments were received during the 30-day public notice period.

No comments were received during the EPA 45-day review period.

Construction Authorization issued on June 5, 2006.

4. Conclusion

Based on the information provided by iLevel by Weyerhaeuser, the MPCA has reasonable assurance that the operation of the emission facility, as described in the Air Emission Permit No. 03500031-002, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Trevor Shearen (permit writer/engineer)
 Dave Crowell (enforcement)
 Andrew Place (stack testing)
 Jenny Reinertsen (peer reviewer)

Attachments: 1. Emissions Increase Calculation Spreadsheets (Table A and Table B)