

**AIR EMISSION PERMIT NO. 07100015- 001**

**IS ISSUED TO**

**International Bildrite, Inc.**

International Bildrite, Inc.  
101 East 4th Street  
International Falls, Koochiching County, MN 56649

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  
Total Facility Operating Permit

Application Date  
03/22/1995

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. 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/True Minor for NSR

**Issue Date:** September 9, 2005

**Expiration:** September 9, 2010

Title I Conditions do not expire.

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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:**

This facility manufactures fiberboard sheathing and roof insulation products. Trees are chipped on site and stored in the yard. Major tree use is white poplar. Also used are corrugated containers and waste paper. The waste corrugated material and paper are blended, processed by a hydropulper and stored.

The chips pass through a washer and a screen and are stored in a chip silo with about a 60 ton capacity. From the silo the chips are fed at a constant rate through one of two refiners that reduce the chips to a mechanical wood pulp.

The two types of materials are blended at the required ratio in a refiner. The mixture is then blended with asphalt chips.

The mixture is deposited on a screen and run through rollers for forming. The pad formed on the wire mesh screen is board. The pad, at this point, consists of about 45 percent fiber and 55 percent water.

The pad, or board, is pressed, cut to master sheets, and run through a kiln dryer. It is then trimmed to sales sizes and palletized.

The major source of emissions is the kiln dryer, emitting volatile organic compounds and particulates. Particulates are also emitted from sawing, planing, and trimming. Emissions from the kiln are uncontrolled. Emissions from the trimming, planer, and saws are controlled by a fabric filter.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/16/05

Facility Name: International Bildrite Inc

Permit Number: 07100015 - 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.**

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

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/16/05

Facility Name: International Bildrite Inc

Permit Number: 07100015 - 001

Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
RECORDKEEPING	hdr
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
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
Fugitive Emissions Control Plan: The Permittee shall submit a fugitive emissions control plan within 60 days of the date of permit issuance for review and approval by the Commissioner. The plan shall identify all fugitive emission sources, primary and contingent control measures, and record keeping. The Permittee shall follow the actions and record keeping specified in the control plan. The plan may be amended by the Permittee with the Commissioner's approval. If the Commissioner determines the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive emission control plan, then the Permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors.	Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0100, subp. 7A, 7L, and 7M; Minn. r. 7011.0150; Minn. R. 7009.0020
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)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/16/05

Facility Name: International Bildrite Inc

Permit Number: 07100015 - 001

Emission 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.	Minn. R. 7019.3000 through Minn. R. 7019.3100
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
AMBIENT AIR QUALITY STANDARDS	hdr
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. section 116.07, subds. 4a and 9, Minn. r. 7007.0100, subps 7 A, 7L and 7M; Minn. R. 7007.0800, subps. 1, 2, and 4, Minn. R. 7009.0010-7009.0080

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/16/05

Facility Name: International Bildrite Inc

Permit Number: 07100015 - 001

**Subject Item:** GP 001 Planer and Trimmers**Associated Items:** EU 002 Planer

EU 003 Main Trimmer

EU 006 #1 Trimmer

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
CONTROL EQUIPMENT REQUIREMENTS	hdr
Vent all emissions through a fabric filter. For operation and maintenance requirements of the fabric filter, see the table for CE001.	Minn. R. 7007.0800, subp. 2



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/16/05

Facility Name: International Bildrite Inc

Permit Number: 07100015 - 001

**Subject Item:** EU 001 Kiln Dryer**Associated Items:** SV 001 Kiln Stack

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0610, subp. 1 A.
Opacity: less than or equal to 20 percent exhibit greater than 20 percent opacity, except for one six-minute period per hour of not more than 60 An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20 percent or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent.	Minn. R. 7011.0715, subp. 1(B)
PERFORMANCE TESTING	hdr
Initial Performance Test: due 180 days after Permit Issuance for Total Particulate Matter and opacity.	Minn. R. 7007.0800, subp. 4

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/16/05

Facility Name: International Bildrite Inc

Permit Number: 07100015 - 001

**Subject Item: EU 004 Logo Marker Machine**

<b>What to do</b>	<b>Why to do it</b>
Initial notification: (1)(i) The requirements of this paragraph apply to the owner or operator of an affected source when such source becomes subject to a relevant standard. (The effective date of this standard is October 1, 2007.)  (2) The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard), shall provide the following information:	40 CFR 63.9(b)(2)
(i) The name and address of the owner or operator; (ii) The address (i.e., physical location) of the affected source; (iii) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date; (iv) A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; and (v) A statement of whether the affected source is a major source or an area source.	continued from above
Include in the above notification of compliance status that you are using non-HAP coatings and that you have a record showing that you are using non-HAP coatings.	continued from above
Keep records showing that you are using non-HAP coatings.	40 CFR 63, Subp. DDDD, Table 6

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/16/05

Facility Name: International Bildrite Inc

Permit Number: 07100015 - 001

**Subject Item:** CE 001 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 002 Planer

EU 003 Main Trimmer

EU 006 #1 Trimmer

What to do	Why to do it
Pressure Drop: greater than or equal to 0.5 and less than or equal to 6, unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated.	Minn. R. 7007.0800, subp. 2 and 14
Visible Emissions: The Permittee shall check the fabric filter stacks (SV 002-004) for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation.	Minn. R. 7007.0800, subp. 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	Minn. R. 7007.0800, subp. 4 and 5
The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subp. 2 and 14
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subp. 4, 5, and 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	Minn. R. 7007.0800, subp. 4
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.	Minn. R. 7007.0800, subp. 4, 5 and 14
The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

09/16/05

Facility Name: International Bildrite Inc

Permit Number: 07100015 - 001

**Subject Item: TK 001 Heated Asphalt**

<b>What to do</b>	<b>Why to do it</b>
EMISSION LIMITS	hdr
Opacity: less than or equal to 0 percent except for one consecutive 15-minute period in any 24-hour period when the transfer lines are being blown for clearing.	40 CFR Section 60.472(c)
Once each day of operation, observe the tank for any visible emissions.  If visible emission are observed, take corrective action. Record the results of the inspection, and any corrective action taken.	Minn. R. 7007.0800, subp. 2

## TABLE B: SUBMITTALS

09/16/05

Facility Name: International Bildrite Inc  
Permit Number: 07100015 - 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:

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**

09/16/05

Facility Name: International Bildrite Inc

Permit Number: 07100015 - 001

<b>What to send</b>	<b>When to send</b>	<b>Portion of Facility Affected</b>
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup of the asphalt tank.	TK001
Notification of the Date Construction Began	due 30 days after Start Of Construction of the asphalt tank.	TK001
Testing Frequency Plan	due 60 days after Initial Performance Test for PM and opacity emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	EU001

**TABLE B: RECURRENT SUBMITTALS**

09/16/05

Facility Name: International Bildrite Inc

Permit Number: 07100015 - 001

What to send	When to send	Portion of Facility Affected
Semiannual Continuous Compliance Report	due 30 days after end of each calendar half-year starting 10/01/2007 that states that you are using non-HAP coatings for the logo-marker .	EU004
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 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 US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

APPENDIX MATERIAL

Facility Name:International Bildrite Inc

Permit Number: 07100015-001

***Insignificant Activities Required to be Listed***

Emission Unit Description	Insignificant Under:	Applicable Regulations
Space Heaters, nat. gas	7007.1300, subp. 3(A)	Minn. R. 7011.0515
Gas Storage tank 200 gallon	7007.1300, subp. 3(E)(1)	
Diesel Storage tank 550 gallon	7007.1300, subp. 3(E)(2)	
Degreasing Operations	7007.1300, subp. 3(H)(7)	
Welding Equipment	7007.1300, subp. 3(H)(3)	Minn. R. 7011.0715
Truck Traffic	7007.1300, subp. 3(J.)	
Wood Storage Pile	7007.1300, subp. 3(I)	



**TECHNICAL SUPPORT DOCUMENT**  
**For**  
**AIR EMISSION PERMIT NO. 07100015-001**

This technical support document 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 draft/proposed permit.

**1. General Information**

**1.1. Applicant and Stationary Source Location:**

Applicant/Address	Stationary Source/Address (SIC Code: 2493)
Owner: International Bildrite, Inc. 101 East Fourth Street International Falls, MN 56649	101 East Fourth Street International Falls Koochiching County
Contact: Travis Forsight Phone: 218-283-3900	

**1.2. Description of the Permit Action**

This facility manufactures fiberboard sheathing and roof insulation products. Trees are chipped on site and stored in the yard. Major tree use is white poplar. Also used are corrugated containers and waste paper. The waste corrugated material and paper are blended, processed by a hydropulper and stored.

The chips pass through a washer and a screen and are stored in a chip silo with about a 60 ton capacity. From the silo the chips are fed at a constant rate through one of two refiners that reduce the chips to a mechanical wood pulp.

The two types of materials are blended at the required ratio in a refiner. The mixture is then blended with asphalt chips.

The mixture is deposited on a screen and run through rollers for forming. The pad formed on the wire mesh screen is board. The pad, at this point, consists of about 45 percent fiber and 55 percent water.

The pad, or board, is pressed, cut to master sheets, and run through a kiln dryer. It is then trimmed to sales sizes and palletized.

The major source of emissions is the kiln dryer, emitting volatile organic compounds and particulates. Particulates are also emitted from sawing, planing, trimming, and blending. Emissions from the kiln and blender are uncontrolled. Emissions from the trimming, planer, and saws are controlled by a fabric filter.

### **1.3 Description of any Changes Allowed with this Permit Issuance**

No changes are allowed by this permit issuance

### **1.4 Facility Emissions:**

**Table 1. Total Facility Potential to Emit Summary**

	PM tpy	PM <sub>10</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> tpy	CO tpy	VOC tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions	77.5	44.2	0.11	18.9	15.9	97.0	79.1	81.4
Total Facility Actual Emissions	67.3	32.2	0.07	11.5	9.65	59.9	HAPs not reported in emission inventory	

**Table 2. Facility Classification**

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD			x
Part 70 Permit Program	X		
Part 63 NESHAP	x		

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

### **New Source Review**

The facility is an existing minor source under New Source Review because potential emissions of all criteria pollutants are less than the 250 tons per year threshold.

### **Part 70 Permit Program**

The facility is likely a major source of hazardous air pollutants, and as such, this permit is being issued as a Part 70 permit.

### New Source Performance Standards (NSPS)

The heated asphalt tank is subject to 40 CFR 60, Subpart UU—Standards of Performance for Asphalt Processing and Asphalt Roof Manufacture.

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

The facility is subject to 40 CFR 63, Subp. DDDD – National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products.

### Minnesota State Rules

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

- Minn. R. 7011.0710 Standards of Performance for Pre-1969 Industrial Process Equipment
- Minn. R. 7011.0610 Standards of Performance for Direct Heating Equipment

**Table 3. Regulatory Overview of Facility**

EU, GP, or SV	Applicable Regulations	Comments:
GP 001 Planers and Trimmers	Minn. R. 7011.0715	Standards of Performance for Industrial Process Equipment
EU 001 Kiln	Minn. R. 7011.0610	Standards of Performance for Direct Heating Equipment
TK 001 Heated Asphalt	40 CFR 60, Subp. UU	Standards of Performance for Asphalt Processing and Asphalt Roof Manufacture.
EU 004 Logo Marker Machine	40 CFR 63, Subp. DDDD	National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products.

### **3. Technical Information**

Emission Calculations are attached. Stack emission test data was used for determining emissions of particulate matter and volatile organic compounds (VOC) from the kiln dryer; the largest emission source. HAP factors are unavailable for a dryer of this type. HAP emissions were estimated by using factors from AP42, Medium Density Fiberboard, Table 10.6.3-3. They are for a tube dryer, direct natural gas, hardwood, SCC 3-07-009-27. Staff determined that this was the most similar process available to estimate HAP emissions from. The International Bildrite dryer is direct natural gas fired, and hardwood is being used. HAP emissions may be somewhat different, however, because asphalt was not the binder used in the process measured by EPA.

The VOC factor from the dryer in AP42 was less than the stack tested value for the International Bildrite dryer so staff scaled all HAP emissions upward according to the difference in measured VOC emissions. (See spreadsheets).

All saws, planers and trimmers are controlled by baghouse. The manufacturer's guaranteed emission rate was used to calculate potential particulate emissions. The permit requires operation and maintenance of the baghouses, and daily visible emission or pressure drop checks.

Logo marker VOC emissions were estimated by using actual VOC content of material used, past usage, and by scaling up to full capacity use. Similar mass balance methods were used for the parts washer.

Roller coater emissions were estimated by calculating maximum asphalt use, and then using factors for particulate matter and VOCs from AP42 for asphalt roof manufacture.

Wind erosion, truck traffic, and material handling emissions were performed using maximum throughputs and MPCA calculation spreadsheet for these types of fugitive emission sources. The MPCA spreadsheets were designed to be used to determine fugitive emissions used in dispersion modeling.

Chipper emissions were estimated assuming full capacity throughput, and factors for wood chipping from AP42 10.6.3-7.

Blender emissions were estimated by using factors from AP42 for medium density fiberboard plants (10.6.3) for blenders.

### **3.2 Periodic Monitoring**

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

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

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

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

**Table 4. Periodic Monitoring**

<b>Emission Unit or Group</b>	<b>Requirement (basis)</b>	<b>Additional Monitoring</b>	<b>Discussion</b>
Planers and Trimmers GP001	Minn. R. 7011.0710 PM: $\leq 0.3$ gr/dscf or less	Monitoring of visible emissions or pressure drop across baghouse. Also maintenance and monitoring of the control equipment	The baghouses are unlikely, if properly maintained, to emit particulate matter in amounts that would exceed the applicable emission limit.
EU001 Kiln	Minn. R. 7011.0710 PM: $\leq 0.3$ gr/dscf or less. At max. capacity, the limit is 14.17 lb/hour or 0.045 gr/dscf	Stack emission testing	There is no control equipment, so no additional monitoring is required.
TK001	Opacity =0%	Daily opacity observations	
EU004 Logo marker machine	Non-HAP containing coatings	Recordkeeping	Compliance demonstration specified by the NESHAP

### **3.3 Insignificant Activities**

List attached to the permit. The insignificant activities listed do not need periodic monitoring because they are either not subject to a standard, or potential emissions are much less than that allowed by the applicable standard.

### **3.4 Comments Received**

Public Notice Period: July 19, 2005 – August 17, 2005

EPA 45-day Review Period: July 19, 2005 – September 5, 2005

Brandy Toft of the Leech Lake Band of Ojibwe submitted a letter regarding the International Bildrite Permit when it was on notice. In her letter, she expressed concern regarding the dust emissions from truck traffic, and asked for a facility tour.

She took the facility tour on August 18, 2005. I contacted her by phone on August 26, 2005. In our discussion, she stated that she no longer had concerns about the facility, and did not wish to submit comments on the permit.

#### **4. Conclusion**

Based on the information provided by International Bildrite, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 07100015-001 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team:      Jenny Reinertsen (permit writer/engineer)  
   Robert Beresford (enforcement)  
   Andrew Place (stack testing)  
   Toni Volkmeier (peer reviewer)

Attachments: 1. Calculation Spreadsheets