

**AIR EMISSION PERMIT NO. 07500001- 001  
IS ISSUED TO**

**Hedstrom Lumber Company Inc.**

**Hedstrom Lumber Company Inc. - Two Harbors**  
1016 Westover Road  
Two Harbors, Lake County, Minnesota 55616

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

Permit Type	Application Date
Total Facility Operating Permit	December 17, 1998

This permit authorizes the Permittee to construct and operate the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit and with all general conditions listed in Minn. R. 7007.0800, subp. 16, which are incorporated by reference. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

**Permit Type:** State ; True Minor

**Issue Date:** May 17, 1999

**Expiration:**

All Title I Conditions do not expire.

Carolina Espejel-Schutt for

Michael J. Sandusky  
Division Manager  
Air Quality Division

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

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

**PERMIT SHIELD:**

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Any requirements which have been determined not to apply are listed in Table A of this permit.

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

**FACILITY DESCRIPTION:**

Hedstrom Lumber Company, Inc. has been in business since 1914, and purchased the Two Harbors Division from Midwest Timber in October of 1996. The business consists of converting raw logs into lumber and chips, with hogged bark, sawdust and shavings as a byproduct. The lumber is kiln dried and finished with a planer before shipping to customers in the upper Midwest.

The sawmill is totally enclosed and heated, and all processing operations from raw logs through rough green lumber take place in the mill. Sawdust and bark are processed through a hog and leave the mill through conveyors to the bins. Chips are conveyed to the chip bin.

The lumber then goes to the dry kiln where most of the moisture is removed, then proceeds to the planing operation, where the lumber is sized, finished and trimmed. Shavings from the planer and sawdust from the trimmer are pneumatically conveyed to a storage bin which controlled by a simple cyclone. Trim-offs are hogged and combined with the planer shavings in the shaving bin.

The hog fuel and chips are loaded into trucks with a front-end loader from the bins. Shavings are loaded from the bin, which is overhead, directly into open top trucks.

The main air emission units at the facility include a wood-fired boiler, a natural gas-fired boiler, a dry kiln, and a planer. However the total facility permit application (and accompanying addendum - letter dated February 23, 1999) also includes the addition of a second wood-fired boiler, a second dry kiln, and a second sawdust/shavings materials handling system. This second sawdust/shavings materials handling system is being installed to improve the overall air flow and collection of sawdust and shavings. The existing system will be dedicated to handling the planer sawdust and shavings and the new system will be dedicated to handling the saw trim sawdust and shavings. Thus this permit accounts for these new units and is thus a total facility operating permit and a construction permit.

In terms of pollution control equipment the original wood-fired boiler has a simple cyclone for particulate control, the new wood-fired boiler will have a multiclone for particulate control, the planer has a simple cyclone for particulate control, and the saw trim system will have a simple cyclone for particulate control.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

05/17/99

Facility Name: Hedstrom Lumber Co Inc - Two Harbors

Permit Number: 07500001 - 001

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

**Subject Item:****Total Facility**

<b>What to do</b>	<b>Why to do it</b>
Comply with the O&M Plan: Follow the actions and record keeping specified in the O&M plan. The plan may be amended by the Agency's written approval.	Minn. R. 7007.0800, subp. 14; Minn. R. 7007.0800, subp. 16(J)
Comply with Fugitive Emission Control Plan: The Permittee shall follow the actions and record keeping specified in the control plan. The plan may be amended by the Permittee with the Agency's approval. If the Agency determines the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive control plan, then the Permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors as requested by the Agency.	Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0800, subp. 2
Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks 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)
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.  At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.  At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

05/17/99

Facility Name: Hedstrom Lumber Co Inc - Two Harbors

Permit Number: 07500001 - 001

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
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
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)
Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.	Minn. R. 7007.0800, subp. 9(A)
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

05/17/99

Facility Name: Hedstrom Lumber Co Inc - Two Harbors

Permit Number: 07500001 - 001

**Subject Item:** EU 001 Boiler #1 (Wood)**Associated Items:** CE 001 Centrifugal Collector - High Efficiency

SV 001

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.6 lbs/million Btu heat input	Minn. R. 7011.0515, subp. 1
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity.	Minn. R. 7011.0515, subp. 2
Fuels Allowed: the Permittee shall only combust wood waste, on-site generated boiler cleaning agents, and on-site generated oil soaked sorbents in EU 001.	Minn. R. 7007.0800, subp. 2
Pollution Control Equipment Monitoring and Record Keeping: the Permittee shall monitor and record the pressure drop across the cyclone (CE 001) once each day while in operation. If the pressure drop is outside the proper range (identified to be 0.1 to 4 inches of water column), take the corrective actions outlined in the O&M plan. Record all corrective actions taken upon completion of the action.	Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5, and Minn. R. 7007.0800, subp. 14

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

05/17/99

Facility Name: Hedstrom Lumber Co Inc - Two Harbors

Permit Number: 07500001 - 001

**Subject Item:** EU 002 Boiler #2 (Gas)**Associated Items:** SV 002

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.6 lbs/million Btu heat input	Minn. R. 7011.0515, subp. 1
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity.	Minn. R. 7011.0515, subp. 2
Fuels Allowed: the Permittee shall only combust natural gas in EU 002.	Minn. R. 7007.0800, subp. 2
Record Keeping: the Permittee shall maintain records of the amount of natural gas combusted in EU 002 each day the unit is operated.	Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5, and Minn. R. 7007.0800, subp. 14



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

05/17/99

Facility Name: Hedstrom Lumber Co Inc - Two Harbors

Permit Number: 07500001 - 001

**Subject Item:** EU 003 Boiler #3 (Wood)**Associated Items:** CE 002 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones  
SV 003

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.6 lbs/million Btu heat input	Minn. R. 7011.0515, subp. 1
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity.	Minn. R. 7011.0515, subp. 2
Fuels Allowed: the Permittee shall only combust wood waste, on-site generated boiler cleaning agents, and on-site generated oil soaked sorbents in EU 003.	Minn. R. 7007.0800, subp. 2
Pollution Control Equipment Monitoring and Record Keeping: the Permittee shall monitor and record the pressure drop across the multiclone (CE 002) once each day while in operation. If the pressure drop is outside the proper range (identified to be 2 to 4 inches of water column), take the corrective actions outlined in the O&M plan. Record all corrective actions taken upon completion of the action.	Minn. R. 7007.0800, subp. 4, Minn. R. 7007.0800, subp. 5, and Minn. R. 7007.0800, subp. 14

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

05/17/99

Facility Name: Hedstrom Lumber Co Inc - Two Harbors

Permit Number: 07500001 - 001

**Subject Item:** EU 004 Dry Kiln #1-Existing**Associated Items:** SV 004

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. 7011.0735.	Minn. R. 7011.0715, subp. 1.A.
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1.B.
Periodic Monitoring: the Permittee shall maintain proper maintenance of the dry kiln (EU 004) so as to prevent excessive amounts of particulate matter from being emitted from the stack/vent listed above under Associated Items.	Minn. R. 7007.0800, subp. 4

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

05/17/99

Facility Name: Hedstrom Lumber Co Inc - Two Harbors

Permit Number: 07500001 - 001

**Subject Item:** EU 005 Dry Kiln #2-Proposed**Associated Items:** SV 005

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. 7011.0735.	Minn. R. 7011.0715, subp. 1.A.
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1.B.
Periodic Monitoring: the Permittee shall maintain proper maintenance of the dry kiln (EU 005) so as to prevent excessive amounts of particulate matter from being emitted from the stack/vent listed above under Associated Items.	Minn. R. 7007.0800, subp. 4

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

05/17/99

Facility Name: Hedstrom Lumber Co Inc - Two Harbors

Permit Number: 07500001 - 001

**Subject Item:** EU 006 Planer Sawdust/Shavings Handling System**Associated Items:** CE 003 Centrifugal Collector - Medium Efficiency

SV 006

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. 7011.0735.	Minn. R. 7011.0715, subp. 1.A.
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1.B.
Pollution Control Equipment Requirements: the Permittee shall maintain operation of the cyclone associated with the emission unit listed above under Associated Items.	Minn. R. 7007.0800, subp. 14
Visible Emissions Observation: the Permittee shall observe the emissions from SV 006 (during daylight hours) for visible emissions of particulate matter once each day while in operation. The observers are not required to be Method 9 certified opacity readers.	Minn. R. 7007.0800, subp. 4
Visible Emissions Corrective Actions: If visible emissions (VEs) are observed the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the VEs.	Minn. R. 7007.0800, subp. 2
Visible Emissions Recordkeeping: the Permittee shall record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, also record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

05/17/99

Facility Name: Hedstrom Lumber Co Inc - Two Harbors

Permit Number: 07500001 - 001

**Subject Item:** EU 007 Saw Trim Sawdust/Shavings Handling System**Associated Items:** CE 004 Centrifugal Collector - Medium Efficiency

SV 007

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. 7011.0735.	Minn. R. 7011.0515, subp. 1
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0515, subp. 2
Pollution Control Equipment Requirements: the Permittee shall maintain operation of the cyclone associated with the emission unit listed above under Associated Items.	Minn. R. 7007.0800, subp. 14
Visible Emissions Observation: the Permittee shall observe the emissions from SV 007 (during daylight hours) for visible emissions of particulate matter once each day while in operation. The observers are not required to be Method 9 certified opacity readers.	Minn. R. 7007.0800, subp. 4
Visible Emissions Corrective Actions: If visible emissions (VEs) are observed the Permittee shall determine the cause and take corrective actions as soon as possible to eliminate the VEs.	Minn. R. 7007.0800, subp. 2
Visible Emissions Recordkeeping: the Permittee shall record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, also record a brief description of the type of corrective actions taken, and the date the actions were taken.	Minn. R. 7007.0800, subp. 5

## TABLE B: SUBMITTALS

05/17/99

Facility Name: Hedstrom Lumber Co Inc - Two Harbors  
Permit Number: 07500001 - 001

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send any application for a permit or permit amendment to:

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

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:

- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

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

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

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak  
Air and Radiation Branch  
EPA Region V  
77 West Jackson Boulevard  
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency  
Clean Air Markets Division  
1200 Pennsylvania Avenue NW (6204N)  
Washington, D.C. 20460

**TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS**

05/17/99

Facility Name: Hedstrom Lumber Co Inc - Two Harbors

Permit Number: 07500001 - 001

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Fugitive Control Plan	due 90 days after Permit Issuance for review and approval by the Agency. 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 Agency's approval. If the Agency 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.	Total Facility
Operation and Maintenance Plan	due 60 days after Permit Issuance for review and approval for all air pollution control equipment and emission units EU 004 and EU 005. Included in the plan should be the manufacturer's recommended operating ranges for parameters such as pressure drop across the system, liquid flow rate, liquid supply pressure, temperature ranges, etc.; corrective action procedures to be followed to return the control equipment to within specified range(s); corrective action procedures to be followed in the event of a malfunction or breakdown; a description of inspection procedures to be followed; and records kept to demonstrate plan implementation.	Total Facility

**TABLE B: RECURRENT SUBMITTALS**

05/17/99

Facility Name: Hedstrom Lumber Co Inc - Two Harbors

Permit Number: 07500001 - 001

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31.	Total Facility
Compliance Certification	due 31 days after end of each calendar year following Permit Issuance (for the previous calendar year). To be submitted on a form approved by the Commissioner. This report covers all deviations experienced during the calendar year.	Total Facility
Emissions Inventory Report	due 91 days after end of each calendar year following Permit Issuance (April 1). To be submitted on a form approved by the Commissioner.	Total Facility



**TECHNICAL SUPPORT DOCUMENT**  
**For**  
**AIR EMISSION PERMIT NO. 07500001-001**

This Technical Support Document (TSD) is for all the interested parties of the permit. The purpose of this document is to set forth the legal and factual basis for the permit conditions, including references to the applicable statutory or regulatory provisions.

**1. General Information**

1.1. Applicant and Stationary Source Location:

<b>Owner and Operator Address and Phone Number (list both if different)</b>	<b>Facility Address (SIC Code: 2421)</b>
Hedstrom Lumber Company, Inc.  1504 Gunflint Trail Grand Marais, Minnesota 55604 Contact: Mr. Howard Hedstrom	Hedstrom Lumber Company, Inc. Two Harbors Division 1016 Westover Road Two Harbors (Lake County), Minnesota 55616 Contact: Mr. Howard Hedstrom

1.2. Description of the facility

Hedstrom Lumber Company, Inc. has been in business since 1914, and purchased the Two Harbors Division from Midwest Timber in October of 1996. The business consists of converting raw logs into lumber and chips, with hogged bark, sawdust and shavings as a byproduct. The lumber is kiln dried and finished with a planer before shipping to customers in the upper Midwest.

The sawmill is totally enclosed and heated, and all processing operations from raw logs through rough green lumber take place in the mill. Sawdust and bark are processed through a hog and leave the mill through conveyors to the bins. Chips are conveyed to the chip bin.

The lumber then goes to the dry kiln where most of the moisture is removed, then proceeds to the planing operation, where the lumber is sized, finished and trimmed. Shavings from the planer and sawdust from the trimmer are pneumatically conveyed to a storage bin. Trim-offs are hogged and combined with the planer shavings in the shaving bin.

The hog fuel and chips are loaded into trucks with a front-end loader from the bins. Shavings are loaded from the bin, which is overhead, directly into open top trucks.

The main air emission units at the facility include a wood-fired boiler, a natural gas-fired boiler, a dry kiln, and a planer. However the total facility permit application (and accompanying addendum - letter dated February 23, 1999) also includes the addition of a second wood-fired boiler, a second dry kiln, and a second sawdust/shavings materials handling system. This second sawdust/shavings materials handling system is being installed to improve the overall air flow and collection of sawdust and shavings. The existing system will be dedicated to handling the planer sawdust and shavings and the new system will be dedicated to handling the saw trim sawdust and shavings. Thus this permit accounts for these new units and is thus a total facility operating permit and a construction permit.

In terms of pollution control equipment the original wood-fired boiler has a simple cyclone for particulate control, the new wood-fired boiler will have a multiclone for particulate control, the planer has a simple cyclone for particulate control, and the saw trim system will have a simple cyclone for particulate control.

### 1.3 Description of any changes allowed with this permit issuance

The changes allowed with this permit are described above in section 1.2 and consist of 1) installation of a second wood-fired boiler, 2) installation of a second dry kiln, and 3) installation of a second sawdust/shavings handling system.

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

Permit Number and Issuance Date	Action Authorized
	This facility has never had an air quality permit before. The previous owner, Midwest Timber, had not applied for a Title V permit but the new owner (Hedstrom Lumber) did apply for a permit after purchasing the facility and realizing the previous owner did not apply.

### 1.5. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary:

EU No.	SV No.	Emission Unit Description	PM tpy	PM <sub>10</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> tpy	CO tpy	VOC tpy	Pb tpy
001	001	Boiler #1 (Wood)	15.8	15.3	0.3	1.4	7.8	2.7	0.0
002	002	Boiler #2 (Gas)	0.2	0.2	0.01	1.84	0.37	0.08	0.0
003	003	Boiler #3 (Wood)	22.3	22.3	0.62	11.6	16.6	5.8	0.0
004	004	Dry Kiln #1 - Existing	-----	-----	-----	-----	-----	37.5	-----
005	005	Dry Kiln #2 - Proposed	-----	-----	-----	-----	-----	37.5	-----
006	006	Planer Sawdust/Shavings Handling System	11.4	11.4	-----	-----	-----	-----	-----
007	007	Saw Trim Sawdust/Shavings Handling System	11.4	11.4	-----	-----	-----	-----	-----

	PM tpy	PM <sub>10</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> tpy	CO tpy	VOC tpy	Pb tpy
Total Facility Limited Potential Emissions*	61.1	60.6	0.93	14.8	24.8	83.6	0.0
Total Facility Actual Emissions*	40.3	40.3	0.28	1.75	8.4	47.6	0.0

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

Table 2. Facility(TF) and Permit Classification

Classification (put x in appropriate box)	Major/Affected Source	*Synthetic Minor	*Minor
PSD (list pollutant)			PM, PM <sub>10</sub> , CO, VOC, SO <sub>2</sub> , NO <sub>x</sub> , and Lead
NAAR (list pollutant) <b>Not applicable</b>			
Part 70 Permit Program (list pollutant)			PM, PM <sub>10</sub> , CO, VOC, SO <sub>2</sub> , NO <sub>x</sub> , and Lead

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

## 2. Regulatory and/or Statutory Basis

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

### Regulatory Overview of Facility

EU, GRP, or SV No.	Applicable Regulations	**Comments:
EU 001, EU 002, EU 003	Minn. R. 7007.0515	Standards of Performance for New Indirect Heating Equipment
EU 004, EU 005, EU 006, EU 007	Minn. R. 7011.0715	Standards of Performance for Post-1969 Industrial Process Equipment

### **3. Technical Information**

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

- Emissions calculations
- GI-07 forms
- February 23, 1999 letter from consultant describing addition of second sawdust/shaving handling system.

### **4. Conclusion**

Based on the information provided by the Hedstrom Lumber Company, Inc., the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 07500001-001, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Brett Ballavance, Bob Beresford

Attachment: Specified in section 3