

**AIR EMISSION PERMIT NO. 04900065- 002  
(MAJOR AMENDMENT)  
IS ISSUED TO**

Berquist Company

**BERGQUIST COMPANY - CANNON FALLS**  
301 West Washington Street  
Cannon Falls, Goodhue County, MN 55009

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
Total Facility Operating Permit	06/12/1995
Major Amendment (MPCA initiated)	11/22/2002

This permit amends Air Emissions Permit No. 04900065-001, and 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.

<b>Permit Type:</b> Federal; Pt 70/Limits to Avoid NSR	<b>Amendment Type:</b> Major
<b>Issue Date:</b> 01/03/2001 <b>(Total Facility Permit)</b>	<b>Issue Date:</b> November 7, 2003 <b>(Modification)</b>
<b>Expiration:</b> 01/03/2006 All Title I Conditions do not expire.	

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Ann M. Foss  
Major Facilities Section Manager  
Major and Remediation 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:**

The Bergquist Company (SIC code 3679) manufactures silicone rubber insulation products. The facility constructed in 1986 consists of three buildings, which house Tower Coater 1 in building one; the coating, lamination, mixing, and assembly/finishing operations in building 3. Building three also houses Tower Coater 2 and the lab coater, which are parts of the manufacturing process.

The process involves silicone milling, dispersion mixing, web coating, parts cleaning, and assembly operations. The control equipment, thermal oxidizers for each of Tower Coaters one and two are located between buildings 1 and 2. The lab coater and Primer/Coater Laminator are vented through control equipment, an additional thermal oxidizer. Each of the coaters is contained in an enclosure. A separate thermal oxidizer serves the drum mixing station. Each mixing station is contained in an enclosure while all the enclosures are routed to the thermal oxidizer.

The volatile organic compounds are captured and routed through the thermal oxidizers. The testing on the thermal oxidizers demonstrated greater than 95 percent destruction at lower temperatures than 1400 degrees Fahrenheit as stated in the permit.

The criteria air pollutants of concern are the Volatile Organic Compounds (VOC). However, the facility has a potential to emit less than 250 tons per year VOC's by accepting Title I conditions on equipment not subject to 40 CFR pt. 60, subpart VVV to be considered a synthetic minor facility for VOCs.

The Permittee is choosing to limit the amount of Hazardous Air Pollutant (HAP) containing chemicals to control the emissions to a rate of less than 9.9 tons per year for one HAP and a combined limit of 24.9 tons per year for all HAPS. This enables the Permittee to remain a synthetic minor source for hazardous air pollutants. The hazardous air pollutants of xylene, toluene, and methyl ethyl ketone are potentially emitted from this facility.

The Tower coater one and the lab coater were constructed or under contract prior to April 30, 1987 and are therefore not subject to 40 CFR pt. 60, subp. VVV, "Standards for Polymeric Coating of Supporting Substrates Facilities" conditions. The facility is accepting Title I conditions to limit emissions and avoid classification as a major source under 40 CFR § 52.21 on the equipment not subject to subpt. VVV.

Tower coater 2, the drum mixing area and the primer laminator were constructed after April 30, 1987, and are subject to 40 CFR pt. 60 subp. VVV.

The Durabond line as described in the permit application was removed from the plant and relocated in Wisconsin, the week of February 9, 1998. Touch screen manufacturing process was relocated to Cannon Falls from Wisconsin in 1999. The touch screen process was determined to be an insignificant activity.

#### **AMENDMENT DESCRIPTION:**

**Permit Action 002:** This permit amendment is an MPCA-initiated amendment under Minn. R. 7007.1600, subp. 1(D). It incorporates operating limits imposed on the Facility under the performance testing rules (Minn. R. 7017.2025, subp. 3). Specifically, the minimum operating temperatures of the thermal oxidizers for Tower Coaters 1 and 2, the lab coater & primer coater/laminator and the drum mixing area were reset in accordance with a letter from the MPCA dated November 22, 2002.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

11/07/03

Facility Name: Bergquist Co - Cannon Falls  
 Permit Number: 04900065 - 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
Total Facility Limit	hdr
HAP-Single: less than or equal to 9.9 tons/year using 12-month Rolling Sum to be calculated by the 15th day of each month for the previous 12-month period. Usage records shall be kept on a daily basis.	Title I Condition: Limit to avoid major source classification under 40 CFR Section 63.2
HAPs - Total: less than or equal to 24.9 tons/year using 12-month Rolling Sum to be calculated by the 15th day of each month for the previous 12-month period. Usage records shall be kept on a daily basis.	Title I Condition: Limit to avoid major source classification under 40 CFR Section 63.2
VOC usage: The permittee is required to record VOC usage on a 12-month rolling sum to be calculated by the 15th day of each month for the previous 12-month period. Usage records shall be kept on a daily basis. All emission units or stacks as allowed in this permit shall be included in this calculation. VOC contents for each VOC-containing material shall be determined as described under the Material Content requirement.	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21
All emission units or stacks as allowed in this permit shall be included in the HAP calculation. HAP contents for each HAP-containing material (i.e. coatings, gun cleaner,...) shall be determined as described under the Material Content requirement.	Title I Condition: Limit to avoid major source classification under 40 CFR Section 63.2
Material Content: VOC, HAPs, and Solids (PM and PM<10 microns) contents in coating materials shall be determined by the Material Safety Data Sheet (MSDS) provided by the supplier for each material used. If a material content range is given on the MSDS, the highest number in the range shall be used in all compliance calculations. Other alternative methods approved by the MPCA may be used to determine the VOC, HAPs, and solids contents. The Division Manager reserves the right to require the Permittee to determine the VOC, HAP, and solids contents of any material, according to EPA reference methods. If an EPA reference method is used for material content determination, the data obtained shall supersede the MSDS.	Title I Condition: Limit to avoid classification as major source or modification under 40 CFR Section 52.21; Limit to avoid major source classification under 40 CFR Section 63.2
Total Facility Requirements	hdr
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit.	Minn. R. 7017.2025
General Performance Test (PT) Requirements:  Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements.  PT Notifications (written): due 30 days before each Performance Test PT Plan: due 30 days before each Performance Test PT Pre-test Meeting: due 7 days before each Performance Test PT Report: due 45 days after each Performance Test PT Report - Microfiche: due 105 days after each Performance Test	Minn. R. 7017.2030, subp. 1-4 and Minn. R. 7017.2035, subp. 1-2
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)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

11/07/03

Facility Name: Bergquist Co - Cannon Falls

Permit Number: 04900065 - 002

<p>Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.</p>	<p>Minn. R. 7011.0020</p>
<p>Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.</p> <p>At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.</p>	<p>Minn. R. 7019.1000, subp. 3</p>
<p>Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.</p> <p>At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.</p>	<p>Minn. R. 7019.1000, subp. 2</p>
<p>Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.</p>	<p>Minn. R. 7019.1000, subp. 1</p>
<p>Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description:</p> <ol style="list-style-type: none"> <li>1. the cause of the deviation;</li> <li>2. the exact dates of the period of the deviation, if the deviation has been corrected;</li> <li>3. whether or not the deviation has been corrected;</li> <li>4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and</li> <li>5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.</li> </ol>	<p>Minn. R. 7019.1000, subp. 1</p>
<p>Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.</p>	<p>Minn. R. 7019.1000, subp. 4</p>
<p>Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.</p>	<p>Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)</p>
<p>Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.</p>	<p>Minn. R. 7011.0150</p>
<p>Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.</p>	<p>Minn. R. 7007.1150 through Minn. R. 7007.1500</p>
<p>Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).</p>	<p>Minn. R. 7007.1400, subp. 1(H)</p>
<p>Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.</p>	<p>Minn. R. 7007.0800, subp. 5(B)</p>
<p>Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).</p>	<p>Minn. R. 7007.0800, subp. 5(C)</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

11/07/03

Facility Name: Bergquist Co - Cannon Falls

Permit Number: 04900065 - 002

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: 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)
Emissions Inventory Report due 91 days after the 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. 7019.3010
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**

11/07/03

Facility Name: Bergquist Co - Cannon Falls

Permit Number: 04900065 - 002

**Subject Item: CE 001 Direct Flame Afterburner**

**Associated Items: EU 001 Tower Coater #1**

What to do	Why to do it
HAPs - Total: greater than or equal to 100 percent capture efficiency	Title I Conditions: Limit to avoid classification as major source under 40 CFR Section 63.2
HAPs - Total: greater than or equal to 95 percent destruction efficiency . The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency.	Title I Conditions: Limit to avoid classification as major source under 40 CFR Section 63.2
Volatile Organic Compounds: greater than or equal to 100 percent capture efficiency	Title I Conditions: Limit to avoid classification as major source under 40 CFR Section 52.21
Volatile Organic Compounds: greater than or equal to 95 percent destruction efficiency The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency.	Title I Conditions: Limit to avoid classification as major source under 40 CFR Section 52.21
Temperature: greater than or equal to 1350 degrees F using 3-hour Rolling Average at the Combustion Chamber until a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average temperature recorded during the most recent performance test where compliance for VOC emissions was demonstrated	Title I Conditions: Limit to avoid classification as major source under 40 CFR Section 52.21; Minn. R. 7007.0800 subp. 4. B.
The permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a monitoring device that continuously indicates and records the combustion temperature of the incinerator. The monitoring device shall have an accuracy within +/- 1 percent of the temperature being measured in Celsius degrees.	Minn. R. 7007.0800 subp. 4. D.
Daily Inspections: The Permittee shall physically check the temperature recording device at least once each operating day to verify that it is working and recording properly.	Minn. R. 7007.0800, subp. 4 and 5
Quarterly Inspections: At least once per calendar quarter, the Permittee shall inspect the control equipment internal and external system components, including but not limited to the refractory, heat exchanger, and electrical systems. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subp. 2, 5, and 14
Record Keeping	hdr
The permittee shall record time periods of mixing or coating operations when the emission control device is malfunctioning or not in use.	Minn. R. 7007.0800 subp. 5. A.
The permittee shall record time periods of mixing or coating operations when each monitoring device is malfunctioning or not in use.	Minn. R. 7007.0800 subp. 5. A.
Reporting	hdr
The permittee shall report quarterly all three hour periods (during actual coating operations) during which the average combustion temperature of the device is more than 50 degrees F (28 degrees C) below the average combustion temperature of the device during the most recent performance test that demonstrated compliance. Reports shall be post marked within 30 days of the end of the reporting period.	Minn. R. 7007.0800 subp. 6. A.
The permittee shall submit a report quarterly for all periods during actual mixing and coating operations when a required monitoring device (if any) was malfunctioning or not operating. The permittee shall also include all periods during actual mixing or coating operations when the control device was malfunctioning or not operating. Reports shall be post marked within 30 days of the end of the reporting period.	Minn. R. 7007.0800 subp. 6. A.
If the permittee is not required to report quarterly noncompliance because no reportable periods have occurred, the permittee shall submit on the semiannual deviations report statements that clarify this fact.	Minn. R. 7007.0800 subp. 6. A.
PERFORMANCE TESTING	hdr
Performance Test: due before end of each 60 months starting 11/01/2001 to measure VOC destruction efficiency. The first test is due November 1, 2001, then every 60 months thereafter.	Title I Conditions: Testing associated with a Title I Condition; Minn. R. 7017.2020, subp. 1
For additional applicable performance test requirements see 'General Performance Test Requirements' in Table A, Subject Item "Total Facility".	



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

11/07/03

Facility Name: Bergquist Co - Cannon Falls

Permit Number: 04900065 - 002

**Subject Item: CE 002 Direct Flame Afterburner**

**Associated Items: EU 002 Tower Coater#2**

What to do	Why to do it
HAPs - Total: greater than or equal to 100 percent capture efficiency	Title I Conditions: Limit to avoid classification as major source under 40 CFR Section 63.2
HAPs - Total: greater than or equal to 95 percent destruction efficiency .The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency.	Title I Conditions: Limit to avoid classification as major source under 40 CFR Section 63.2
Volatile Organic Compounds: greater than or equal to 100 percent capture efficiency	40 CFR Section 60.742(b)(2)
Volatile Organic Compounds: greater than or equal to 95 percent destruction efficiency	40 CFR Section 60.742(b)(2)
Temperature: greater than or equal to 1225 degrees F using 3-hour Rolling Average at the Combustion Chamber until a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average temperature recorded during the most recent performance test where compliance for VOC emissions was demonstrated	Minn. R. 7007.0800 subp. 4. B.
The permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a monitoring device that continuously indicates and records the combustion temperature of the incinerator. The monitoring device shall have an accuracy within +/- 1 percent of the temperature being measured in Celsius degrees.	40CFR Section 60.744 (e)
Daily Inspections: The Permittee shall physically check the temperature recording device at least once each operating day to verify that it is working and recording properly.	Minn. R. 7007.0800, subp. 4 and 5
Quarterly Inspections: At least once per calendar quarter, the Permittee shall inspect the control equipment internal and external system components, including but not limited to the refractory, heat exchanger, and electrical systems. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subp. 2, 5, and 14
Record Keeping	hdr
The permittee shall record time periods of mixing or coating operations when the emission control device is malfunctioning or not in use.	40 CFR Section 60.744 (i)
The permittee shall record time periods of mixing or coating operations when each monitoring device is malfunctioning or not in use.	40 CFR Section 60.744 (j)
Reporting	hdr
The permittee shall report quarterly all three hour periods (during actual coating operations) during which the average combustion temperature of the device is more than 50 degrees F (28 degrees C) below the average combustion temperature of the device during the most recent performance test that demonstrated compliance. Reports shall be post marked within 30 days of the end of the reporting period.	40 CFR Section 60.747 (d) (4)
The permittee shall submit a report quarterly for all periods during actual mixing and coating operations when a required monitoring device (if any) was malfunctioning or not operating. The permittee shall also include all periods during actual mixing or coating operations when the control device was malfunctioning or not operating. Reports shall be post marked within 30 days of the end of the reporting period.	40 CFR60.747(F)
If the permittee is not required to report quarterly noncompliance because no reportable periods have occurred, the permittee shall submit on the semiannual deviations report statements that clarify this fact.	40CFR60.747(d)(7)
PERFORMANCE TESTING	hdr
Performance Test: due before end of each 60 months starting 11/01/2001 to measure VOC destruction efficiency. The first test is due November 1, 2001, then every 60 months thereafter.	Minn. R. 7017.2020, subp. 1
For additional applicable performance test requirements see 'General Performance Test Requirements' in Table A, Subject Item "Total Facility".	

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

11/07/03

Facility Name: Bergquist Co - Cannon Falls

Permit Number: 04900065 - 002

**Subject Item:** CE 003 Direct Flame Afterburner

**Associated Items:** EU 003 Lab Coater

EU 005 Primer Coater/ Laminator

What to do	Why to do it
HAPs - Total: greater than or equal to 100 percent capture efficiency	Title I Conditions: Limit to avoid classification as major source under 40 CFR Section 63.2
HAPs - Total: greater than or equal to 95 percent destruction efficiency .The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency.	Title I Conditions: Limit to avoid classification as major source under 40 CFR Section 63.2
Volatile Organic Compounds: greater than or equal to 100 percent capture efficiency	40 CFR Section 60.742(b)(2) For EU006; Title I Condition: to avoid classification as a major source under 40 CFR Section 52.21 for unit EU003
Volatile Organic Compounds: greater than or equal to 95 percent destruction efficiency	40 CFR Section 60.742(b)(2) For EU006; Title I Condition: to avoid classification as a major source under 40 CFR Section 52.21 for unit EU003
Temperature: greater than or equal to 1250 degrees F using 3-hour Rolling Average at the Combustion Chamber until a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average temperature recorded during the most recent performance test where compliance for VOC emissions was demonstrated	Minn. R. 7007.0800 subp. 4. B.
The permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a monitoring device that continuously indicates and records the combustion temperature of the incinerator. The monitoring device shall have an accuracy within +/- 1 percent of the temperature being measured in Celsius degrees.	40 CFR Section 60.744(e) For EU006;
Daily Inspections: The Permittee shall physically check the temperature recording device at least once each operating day to verify that it is working and recording properly.	Minn. R. 7007.0800, subp. 4 and 5
Quarterly Inspections: At least once per calendar quarter, the Permittee shall inspect the control equipment internal and external system components, including but not limited to the refractory, heat exchanger, and electrical systems. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subp. 2, 5, and 14
Record Keeping	hdr
The permittee shall record time periods of mixing or coating operations when the emission control device is malfunctioning or not in use.	40 CFR Section 60.744 (i)
The permittee shall record time periods of mixing or coating operations when each monitoring device is malfunctioning or not in use.	40 CFR Section 60.744 (j)
Reporting	hdr
The permittee shall report quarterly all three hour periods (during actual coating operations) during which the average combustion temperature of the device is more than 50 degrees F (28 degrees C) below the average combustion temperature of the device during the most recent performance test that demonstrated compliance. Reports shall be post marked within 30 days of the end of the reporting period	40 CFR Section 60.747 (d) (4)
The permittee shall submit a report quarterly for all periods during actual mixing and coating operations when a required monitoring device (if any) was malfunctioning or not operating. The permittee shall also include all periods during actual mixing or coating operations when the control device was malfunctioning or not operating. Reports shall be post marked within 30 days of the end of the reporting period.	40 CFR60.747(F)
If the permittee is not required to report quarterly noncompliance because no reportable periods have occurred, the permittee shall submit on the semiannual deviations report statements that clarify this fact.	40CFR60.747(d)(7)
PERFORMANCE TESTING	hdr
Performance Test: due before end of each 60 months starting 11/01/2001 to measure VOC destruction efficiency. The first test is due November 1, 2001, then every 60 months thereafter.	Minn. R. 7017.2020, subp. 1
For additional applicable performance test requirements see 'General Performance Test Requirements' in Table A, Subject Item "Total Facility".	

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

11/07/03

Facility Name: Bergquist Co - Cannon Falls

Permit Number: 04900065 - 002

**Subject Item: CE 004 Direct Flame Afterburner**

**Associated Items: EU 004 Drum Mixing Station**

What to do	Why to do it
HAPs - Total: greater than or equal to 100 percent capture efficiency	Title I Conditions: Limit to avoid classification as major source under 40 CFR Section 63.2
HAPs - Total: greater than or equal to 95 percent destruction efficiency . The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency.	Title I Conditions: Limit to avoid classification as major source under 40 CFR Section 63.2
Volatile Organic Compounds: greater than or equal to 100 percent capture efficiency	40 CFR Section 60.742(b)(2)
Volatile Organic Compounds: greater than or equal to 95 percent destruction efficiency	40 CFR Section 60.742(b)(2)
Temperature: greater than or equal to 1225 degrees F using 3-hour Rolling Average at the Combustion Chamber until a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average temperature recorded during the most recent performance test where compliance for VOC emissions was demonstrated	Minn. R. 7007.0800 subp. 4. B.
The permittee shall install, calibrate, maintain and operate according to the manufacturer's specifications a monitoring device that continuously indicates and records the combustion temperature of the incinerator. The monitoring device shall have an accuracy within +/- 1 percent of the temperature being measured in Celsius degrees.	40CFR Section 60.744 (e)
Daily Inspections: The Permittee shall physically check the temperature recording device at least once each operating day to verify that it is working and recording properly.	Minn. R. 7007.0800, subp. 4 and 5
Quarterly Inspections: At least once per calendar quarter, the Permittee shall inspect the control equipment internal and external system components, including but not limited to the refractory, heat exchanger, and electrical systems. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subp. 2, 5, and 14
Record Keeping	hdr
The permittee shall record time periods of mixing or coating operations when the emission control device is malfunctioning or not in use.	40 CFR Section 60.744 (i)
The permittee shall record time periods of mixing or coating operations when each monitoring device is malfunctioning or not in use.	40 CFR Section 60.744 (j)
Reporting	hdr
The permittee shall report quarterly all three hour periods (during actual coating operations) during which the average combustion temperature of the device is more than 50 degrees F (28 degrees C) below the average combustion temperature of the device during the most recent performance test that demonstrated compliance. Reports shall be post marked within 30 days of the end of the reporting period.	40 CFR Section 60.747 (d) (4)
The permittee shall submit a report quarterly for all periods during actual mixing and coating operations when a required monitoring device (if any) was malfunctioning or not operating. The permittee shall also include all periods during actual mixing or coating operations when the control device was malfunctioning or not operating. Reports shall be post marked within 30 days of the end of the reporting period.	40 CFR60.747(F)
If the permittee is not required to report quarterly noncompliance because no reportable periods have occurred, the permittee shall submit on the semiannual deviations report statements that clarify this fact.	40CFR60.747(d)(7)
PERFORMANCE TESTING	hdr
Performance Test: due before end of each 60 months starting 11/01/2001 to measure VOC destruction efficiency. The first test is due November 1, 2001, then every 60 months thereafter.	Minn. R. 7017.2020, subp. 1
For additional applicable performance test requirements see 'General Performance Test Requirements' in Table A, Subject Item "Total Facility".	

**TABLE B: SUBMITTALS**

11/07/03

Facility Name: Bergquist Co - Cannon Falls  
Permit Number: 04900065 - 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:

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**

11/07/03

Facility Name: Bergquist Co - Cannon Falls

Permit Number: 04900065 - 002

<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

**TABLE B: RECURRENT SUBMITTALS**

11/07/03

Facility Name: Bergquist Co - Cannon Falls

Permit Number: 04900065 - 002

<b>What to send</b>	<b>When to send</b>	<b>Portion of Facility Affected</b>
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 01/03/2001 . 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 starting 01/03/2001 (for the previous calendar year). To be submitted on a form approved by the Commissioner , both to the Commissioner, and to the U.S. EPA regional office in Chicago. This report covers all deviations experienced during the calendar year. The EPA copy shall be sent to: Mr. George Czerniak, Chief, Air Enforcement and Compliance Assurance Branch, Air and Radiation Division, EPA Region V, 77 West Jackson Boulevard, Chicago, Illinois 60604	Total Facility

## APPENDIX MATERIAL

Facility Name: Bergquist Co. - Cannon Falls

Permit Number: 04900065-002

The insignificant activities include 19 space heaters located throughout the facility heated with natural gas, the lab hood, two 2,000 gallon Xylene tanks, touch-screen manufacturing, and the milling area where dust generated from the milling process is drawn through a cyclone followed by a baghouse. The exhaust air from the baghouse is recirculated to the milling room 100 % of the time allowing it to qualify as an insignificant activity. The space heaters qualify as an insignificant activity under the list of insignificant activities. The lab hood is considered to be an insignificant activity and is estimated to generate 0.16 tons per year of emissions from Xylene. The emissions from the Xylene tanks were calculated at 0.006 tons per year each. The adhesives used in the touch screen process are estimated at less than 100 pound per year. Adding this maximum potential to the actual emissions identified in the permit application, the facility still could remain a synthetic minor source. The insignificant activities result in 0.27 tons per year in VOCs and would not increase the potential to emit beyond the 250 tons per year threshold. No periodic monitoring has been established for the insignificant activities because the low potential to emit would not elevate the facility to a major source.

After the permit was placed on public notice the company submitted notification of the addition of a non-solvent bearing coater. The company is installing a new infrared (IR) baking oven for this line. Infrared ovens are also considered an insignificant activity. The anticipated potential to emit from this source is 0.24 tons annual and would not increase the VOC potential beyond the 250 ton per year threshold.

## Insignificant Activities and Applicable Requirements

Minn. R. 7007.1300, subpart	Rule Description of the Activity	Applicable Requirement
3(A)	Fuel use: space heaters fueled by, kerosene, natural gas, or propane.	Minn. R. 7011.0510/0515
3(B)	Furnaces, boilers, and incinerators:	
	infrared electric ovens; and	Minn. R. 7011.0105/0110
	fuel burning equipment with a capacity less than 500,000 Btu/hour but only if the total combined capacity of all fuel burning equipment at the stationary source with a capacity less than 500,000 Btu per hour is less than or equal to 2,000,000 Btu/hour.	Minn. R. 7011.0510/0515 OR Minn. R. 7011.0610 + Minn. R. 7011.1215
3(C)	Fabrication operations: equipment used exclusively for forging, pressing, drawing, spinning, or extruding hot metals.	Minn. R. 7011.0710/0715
3(D)	Processing operations:	
	1. open tumblers with a batch capacity of 1,000 pounds or less; and	Minn. R. 7011.0710/0715
	2. Equipment venting particulate matter (PM) or particulate matter less than 10 microns (PM-10) inside a building, provided that emissions from the equipment are: a). filtered through an air cleaning system; and b). vented inside of the building 100% of the time.	Minn. R. 7011.0710/0715
3(E)	Storage tanks:	
	1. gasoline storage tanks with a combined total tankage capacity of not more than 10,000 gallons; and	Minn. R. 7011.0710/0715 OR Minn. R. 7011.1505, subp. 2(B)/1505, subp. 3(B) OR Minn. R. 7011.0105/0110 ( <i>if not associated with industrial process per the IPE definition</i> )
	2. non-hazardous air pollutant VOC storage tanks with a combined total tankage capacity of not more than 10,000 gallons of non-hazardous air pollutant VOCs and with a vapor pressure of not more than 1.0 psia at 60 degrees Fahrenheit.	Minn. R. 7011.0710/0715 OR Minn. R. 7011.1505, subp. 2(B)/1505, subp. 3 (B) OR Minn. R. 7011.0105/0110
3(F)	Cleaning operations: commercial laundries, not including dry cleaners and industrial launderers.	Minn. R. 7011.0105/0110
3(G)	Emissions from a laboratory, as defined in the subpart.	Minn. R. 7011.0510/0515 + Minn. R. 7011.0610 + Minn. R.



Minn. R. 7007.1300, subpart	Rule Description of the Activity	Applicable Requirement
		7011.0710/0715
3(H)	Miscellaneous:	
	1. total usage of less than 200 gallons of VOC (including hazardous air pollutant-containing VOC) combined in any consecutive 12 months period at a stationary source;	Minn. R. 7011.0710/0715 OR Minn. R. 7011.0105/0110
	2. equipment used exclusively for packaging lubricants or grease;	Minn. R. 7011.0710/0715 OR Minn. R. 7011.0105/0110
	3. equipment used for hydraulic or hydrostatic testing;	Minn. R. 7011.0710/0715
	4. brazing, soldering or welding equipment;	Minn. R. 7011.0510/.0515 + Minn. R. 7011.0610 + Minn. R. 7011.0710/0715
	5. blueprint copiers and photographic processes;	Minn. R. 7011.0105/0110
	6. equipment used exclusively for melting or application of wax;	Minn. R. 7011.0510/.0515 + Minn. R. 7011.0610 + Minn. R. 7011.0710/0715
	7. nonasbestos equipment used exclusively for bonding lining to brake shoes; and	Minn. R. 7011.0710/0715
	8. cleaning operations: alkaline/phosphate cleaners and associated cleaners and associated burners.	Minn. R. 7011.0510/.0515 + Minn. R. 7011.0610 + Minn. R. 7011.0710/0715
3(I)	Individual emissions units at a stationary source, each of which have a potential to emit the following pollutants in amounts less than:  1. 4,000 lbs/year of carbon monoxide; and  2. 2,000 lbs/year each of nitrogen oxide, sulfur dioxide, particulate matter, particulate matter less than ten microns, volatile organic compounds (including hazardous air pollutant-containing VOC), and ozone.	Two 2000 gallon Xylene tanks.
3(J)	Fugitive Emissions from roads and parking lots.	Minn. R. 7011.0150
3(K)	Infrequent use of spray paint equipment for routine housekeeping or plant upkeep activities not associated with primary production processes at the stationary source, such as spray painting of buildings, machinery, vehicles, and other supporting equipment.	Minn. R. 7011.0710/0715

**TECHNICAL SUPPORT DOCUMENT  
For  
DRAFT AIR EMISSION PERMIT AMENDMENTS**

This technical support document is for all the interested parties of the draft permit amendments. 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. Table 1 - Permits Being Amended:**

Permit No.	Owner/Operator Address	Facility Address
04900065-002	Bergquist Company 5300 Edina Industrial Boulevard Edina, MN 55439	301 West Washington Street Cannon Falls Goodhue County
16300003-008	Marathon Ashland Petroleum LLC PO Box 9 459 3 <sup>rd</sup> Avenue St. Paul Park, MN 55071	Marathon Ashland Petroleum LLC 459 3 <sup>rd</sup> Avenue St. Paul Park, MN 55071
01700002-007	Sappi Cloquet LLC PO Box 503 2201 Avenue B Cloquet, MN 55720	Sappi Cloquet LLC 2201 Avenue B Cloquet, MN 55720
08300038-006	ADM Corn Processing – Marshall 901 Highway 59 Marshall, MN 56258	ADM Corn Processing – Marshall 400 West Erie Road Marshall, MN 56258
13700005-002	US Steel Minn Ore Operations – Minntac PO Box 417 Mountain Iron, MN 55768	US Steel Minn Ore Operations – Minntac 8819 Old Highway 169 Mountain Iron, MN 55768

**1.2. Reason for Permit Actions**

These permit amendments are Minnesota Pollution Control Agency (MPCA) initiated major amendments under Minn. R. 7007.1600, subp. 1(D); mandatory reopenings that are needed in order to assure compliance with applicable requirements.

The amendments incorporate new or revised limits into the referenced permits. The limits have been imposed through performance testing under Minn. R. 7017.2025, subp. 3 and are already in affect. The permits must be reopened in order to reflect the revised limits.

These amendments are from MPCA letters sent between October 1, 2002, and June 30, 2003, that set new limits in Part 70 permits based on performance testing under Minn. R. ch. 7017.

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### 1.3. Change in Emissions

There are no changes in emissions associated with the permit reopenings.

### 1.4 Comments on Draft Permit for ADM Corn Processing – Marshall

The permittee submitted comments on the draft permit. All comments were resolved. One comment corrected an erroneous reference to a different facility. The other comment addressed the increased production limit. The draft permit stated that the production limit set as a result of performance testing would be increased to 20,832 lb/hr, whereas the letter of compliance from performance testing stated that the production limit should be increased to 30,910 lb/hr. The emission limit for the stack is not affected by the production limit, nor is it relied upon for determination of applicable requirements. The permit now states that the new production limit is 30,910 lb/hr.

## 2. Regulatory and/or Statutory Basis

The following table shows which permit limits were revised in each permit, as well as the date of the MPCA letter that sets the new limits. See Attachment 1 to this TSD for a copy of the letters.

**Table 2 Regulatory Overview**

Permit No.	Level	Old/New Limits	Basis
16300003-007 (Marathon Ashland Petroleum LLC)	EU022	Old: Performance Test frequency based on a 36-month basis, but still included date for annual testing.  New: Removed obsolete requirement to test by 3/31/03 (test conducted).	August 16, 2002, letter from MPCA implementing Minn. R. 7017.2025, subp. 3
16300003-007 (Marathon Ashland Petroleum LLC)	EU025	Old: Fuel Usage limit of 25.7 MMBtu/hr based on an 8-hour block average...  New: Fuel Usage limit of 24.5 MMBtu/hr based on an 8-hour block average...	June 17, 2003, letter from MPCA implementing Minn. R. 7017.2025, subp. 3
16300003-007 (Marathon Ashland Petroleum LLC)	EU026	Old: Fuel Usage limit of 32.8 MMBtu/hr based on an 8-hour block average...  New: Fuel Usage limit of 46	November 19, 2002, letter from MPCA implementing Minn. R. 7017.2025, subp. 3

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		MMBtu/hr based on an 8-hour block average...	
04900065-002 (Bergquist Co. – Cannon Falls)	CE001	Old: Thermal Oxidizer Temperature $\geq 1400^{\circ}\text{F}$  New: Thermal Oxidizer Temperature $\geq 1350^{\circ}\text{F}$	November 22, 2002 letter from MPCA implementing Minn. R. 7017.2025, subp. 3
04900065-002 (Bergquist Co. – Cannon Falls)	CE002	Old: Thermal Oxidizer Temperature $\geq 1400^{\circ}\text{F}$  New: Thermal Oxidizer Temperature $\geq 1225^{\circ}\text{F}$	November 22, 2002 letter from MPCA implementing Minn. R. 7017.2025, subp. 3
04900065-002 (Bergquist Co. – Cannon Falls)	CE003	Old: Thermal Oxidizer Temperature $\geq 1400^{\circ}\text{F}$  New: Thermal Oxidizer Temperature $\geq 1250^{\circ}\text{F}$	November 22, 2002 letter from MPCA implementing Minn. R. 7017.2025, subp. 3
04900065-002 (Bergquist Co. – Cannon Falls)	CE004	Old: Thermal Oxidizer Temperature $\geq 1400^{\circ}\text{F}$  New: Thermal Oxidizer Temperature $\geq 1225^{\circ}\text{F}$	November 22, 2002 letter from MPCA implementing Minn. R. 7017.2025, subp. 3
08300038-006 (ADM Corn Processing – Marshall)	SV011	Old: Process throughput $\leq 20,613$ lb/hr using 30-day rolling average...  New: Process throughput $\leq 30,910$ lb/hr using 30-day rolling average...	November 6, 2002 letter from MPCA implementing Minn. R. 7017.2025, subp. 3
08300038-006 (ADM Corn Processing – Marshall)	SV011	Old: Performance Test: due before end of each 36 months starting 12/03/2003 to measure (1) NOx and (2) CO emissions at the stack. The first test is due December 6, 2003, then every 36 months thereafter.  New: Performance Test: due before end of each 36 months starting 9/02/2002 to measure (1) NOx and (2) CO emissions at the stack. Initial performance testing was completed 9/02/2002.	Clarification in permit that required testing has been completed.

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01700002-007 (Sappi Cloquet LLC)	EU002	Old: Steam Generation: ≤ 194,260 lb/hr using 8-hr block average...  New: Steam Generation: ≤ 203,720 lb/hr using 8-hr block average...	June 5, 2003 letter from MPCA implementing Minn. R. 7017.2025, subp. 3
01700002-007 (Sappi Cloquet LLC)	EU002	Old: Wood/bark Usage: ≤ 24.2 tons/hr using 8-hr block average...  New: Wood/bark Usage: ≤ 22.2 tons/hr using 8-hr block average...	June 5, 2003 letter from MPCA implementing Minn. R. 7017.2025, subp. 3
13700005-002 (US Steel Minn Ore Operations – Minntac)	SV122	Old: No operating limit  New: Liquid Flow Rate: ≥ 270 gallons/minute using 8-hr block average...	May 16, 2003 letter from MPCA implementing Minn. R. 7017.2025, subp. 3

### 3. Contact

MPCA staff contact for these Permit Actions: Bonnie J. Nelson

Attachment No. 1: MPCA Performance Test Letters with corresponding permit changes.

Attachment No. 2: Comment letter from ADM with corresponding permit changes.

Permit Action Number:

Date: 12/18/2003

# **Attachment 1**

Letters of Compliance with corresponding permit changes