

**AIR EMISSION PERMIT NO. 08300038- 001  
IS ISSUED TO**

**Minnesota Corn Processors, LLC**  
901 North Highway 59  
Marshall, Lyon County, MN 56258

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

<b>Permit Type</b>	<b>Application Date</b>
Total Facility Operating Permit	January 17, 1995 (revised 01/11/99 and 03/02/00)
Major Amendment Application	December 28, 1999 (revised 03/02/00)

This permit authorizes the Permittee to operate the stationary source located at 400 West Erie Road, Marshall, Minnesota 56258, 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:** Part 70/NSR Authorization  
**Issue Date:** August 8, 2000  
**Expiration:** August 8, 2005  
All Title I Conditions do not expire.

Don Smith  
\_\_\_\_\_  
Rodney E. Massey  
Director  
South District

TV:smd

For Karen A. Studders  
Commissioner  
Minnesota Pollution Control Agency

## **TABLE OF CONTENTS**

**Notice to the Permittee**

**Permit Shield**

**Facility Description**

**Table A: Limits and Other Requirements**

**Table B: Submittals**

**Appendix I – Modeling Parameters**

**Appendix II – Insignificant Activities and Applicable Requirements**

**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.

**FACILITY DESCRIPTION:**

Minnesota Corn Processors, LLC (MCP) is a wet corn mill and ethanol production plant. The existing stationary source includes equipment for receiving, cleaning, storing, and milling corn. The source also includes equipment for the generation of steam and the production of corn syrup, cornstarch, and high fructose corn syrup.

The MCP facility is a major source under the federal Part 70 permit program, and a major source of particulate matter, nitrogen oxides, sulfur dioxide, and carbon monoxide under the federal Prevention of Significant Deterioration program.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

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

**Subject Item: Total Facility**

What to do	Why to do it
A. FACILITY SPECIFIC REQUIREMENTS	hdr
Parameters Used in Modeling: The stack heights, stack diameters, air flow rates, and exhaust gas temperatures used in the modeling performed for the PSD analysis for this permit are listed in Appendix I of this permit. The Permittee must submit to the Agency for approval any revisions of these parameters that are caused by a physical change or change in the method of operation of the facility and must wait for a written approval before making such changes. The information submitted must include, at a minimum, the locations, heights and diameters of the stacks, locations and dimensions of nearby buildings, the velocity and temperature of the gases emitted, and the PM10, SO2, NOX, and CO emission rates. The plume dispersion characteristics after the proposed revisions must be equivalent to or better than the dispersion characteristics used in the model dated February 29, 2000. The Permittee shall demonstrate this equivalency in the proposal.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
If the information submitted does not demonstrate equivalent or better dispersion characteristics, or if a conclusion cannot readily be made about the dispersion, the Permittee must remodel.  For any physical change to or change in the method of operation of a stack emitting PM10 or for any increase in PM10 emissions (whether or not the increase would require a permit amendment of any type), the Permittee must remodel.  For changes that do not involve any increase to any emission rate or any emissions from a new emission point, this proposal must be submitted as soon as practicable, but no less than 60 days before beginning actual construction of the modification, stack, or associated emission unit(s).	Title I Condition, continued from above...
For changes involving increases in emission rates or emissions from a new emission point and that require a minor permit amendment, the proposal and/or required modeling analysis must be submitted as soon as practicable, but no less than 60 days before beginning actual construction of the modification, stack, or associated emission unit(s).  For changes involving increases in emission rates or emissions from a new emission point and that require a permit amendment other than a minor amendment, the proposal and/or modeling analysis must be submitted with the permit application.	Title I Condition, continued from above...
B. GENERAL REQUIREMENTS	hdr
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. The plan must include a maintenance schedule.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance of Control Equipment: The Permittee shall conduct all necessary maintenance and make all necessary attempts to keep all pollution control equipment in proper operating condition at all times. The Permittee shall operate and maintain the control equipment according to the manufacturer's specifications or the Operation and Maintenance Plan developed by the Permittee.	Title I Condition: Monitoring for 40 CFR Section 52.21 (j) or (k)
Permittee Inspection of Control Equipment: The Permittee shall inspect all control equipment according to manufacturer's specifications or the Operation and Maintenance Plan developed by the Permittee, and maintain a written record of the inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 2 and subp. 14
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

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

<p>General Performance Test (PT) Requirements:</p> <p>Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements.</p> <p>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</p>	<p>Minn. R. 7017.2030, subp. 1, subp. 1-4 and Minn. R. 7017.2035, subp. 1-2</p>
<p>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.</p>	<p>Minn. R. 7007.0800, subp. 4(D)</p>
<p>Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).</p>	<p>Minn. R. 7007.0800, subp. 4(D)</p>
<p>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.</p>	<p>Minn. R. 7007.0800, subp. 4(D)</p>
<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 (651)296-7300 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 at (651)296-7300 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 MPCA 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>MPCA: (651)296-7300                  State Duty Officer: (651)649-5451 or (800)422-0798</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>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

<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. All changes involving any requirement identified as a Title I Condition require a major amendment.</p> <p>Submit all applications to the Air Quality Permit Technical Advisor, Minnesota Pollution Control Agency, Metro District/Major Facilities, 520 Lafayette Road North, St. Paul, MN 55155</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>Submit all permit and amendment applications to the Air Quality Permit Technical Advisor, Minnesota Pollution Control Agency, Metro District/Major Facilities, 520 Lafayette Road North, St. Paul, MN 55155</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 or at the corporate offices in Marshall, MN, 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>
<p>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.</p>	<p>Minn. R. 7030.0010 - 7030.0080</p>
<p>The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.</p>	<p>Minn. R. 7007.0800, subp. 16</p>
<p>Inspections: The permittee shall comply with the inspection procedures and requirements as found at Minn. R. 7007.0800, subp 9(A).</p>	<p>Minn. R. 7007.0800, subp. 9(A)</p>
<p>Emissions Inventory Report: due April 1 of each year. To be submitted on a form approved by the Commissioner.</p>	<p>Minn. R. 7019.3000 through Minn. R. 7019.3010</p>
<p>Emission Fees: due 60 days after receipt of an MPCA bill.</p>	<p>Minn. R. 7002.0005 through Minn. R. 7002.0095</p>
<p>Insignificant Activities Required to be Listed: Appendix II includes activities and sources at the facility that have been determined to be insignificant under Minn. R. 7007.1300. This list is not all-inclusive; it is subject to change.</p> <p>The Permittee shall properly maintain the sources listed in Appendix II, to prevent excessive amounts of pollutants from being emitted from them.</p>	<p>Minn. R. 7007.0800, subp. 2; Minn. R. 7007.1300</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: GP 001 Corn Silos 1-6**

- Associated Items:** SV 025 Corn Silo #1  
 SV 026 Corn Silo #2  
 SV 027 Corn Silo #3  
 SV 028 Corn Silo #4  
 SV 031 Corn Silo #5  
 SV 032 Corn Silo #6

What to do	Why to do it
A. EMISSION LIMITS (Apply individually to each of SV025, SV026, SV027, SV028, SV031, SV032)	hdr
Total Particulate Matter: less than or equal to 0.07 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Particulate Matter < 10 micron: less than or equal to 0.07 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.010 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1005, subp. 3(D)
Opacity: less than or equal to 5 percent opacity from fugitive emissions from each unit (emissions directly from the unit, not collected by ductwork to the fabric filter)	Minn. R. 7011.1005, subp. 3(A)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check each stack (outlets of CE063, CE064, CE065, CE066, CE067, and CE068) for any visible emissions, or, during inclement weather, read and record pressure drop across the baghouse two (2) times per calendar week, when the emission unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
C. EMISSION UNIT OPERATION (EU101 - EU106)	hdr
The Permittee shall clean up commodities spilled on the driveway and other facility property as required to minimize fugitive emissions to a level consistent with RACT (reasonably available control technology).	Minn. R. 7011.1005, subp. 1(A)
D. CONTROL EQUIPMENT OPERATION (CE063, CE064, CE065, CE066, CE067, CE068 - fabric filters)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control equipment required to meet modeling limits)
Total Particulate Matter: greater than or equal to 80 percent control efficiency	Minn. R. 7011.1005, subp 3(E)
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 10.0 inches of water column (for each baghouse)	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item:** GP 002 Sources of Fugitive Particulate Matter

**Associated Items:** FS 003 Vehicle Traffic (paved roads)

FS 004 Coal Pile & Coal transfer operations

What to do	Why to do it
<p>Do not cause or permit the transporting of any material in a manner which may allow avoidable amounts of particulate matter to become airborne.</p> <p>Do not cause or permit a road or a driveway to be constructed, used, repaired, or demolished without applying all such reasonable measures as may be required to prevent particulate matter from becoming airborne. Take reasonable precautions to prevent the discharge of visible fugitive dust emissions beyond the lot line of the property on which the emissions originate. The commissioner may require such reasonable measures as may be necessary to prevent particulate matter from becoming airborne, including but not limited to, paving or frequent clearing of roads, driveways, and parking lots; application of dust-free surfaces; application of water; and the planting and maintenance of vegetative ground cover.</p>	<p>Minn. R. 7011.0150</p>



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 001 Old Corn Receiving Area**

**Associated Items: EU 001 Old Corn Receiving Pit (multiple components)**

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.88 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by citizens.	Minn. R. 7009.0020
Particulate Matter < 10 micron: less than or equal to 0.88 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.009 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1005, subp. 3(D)
Opacity: less than or equal to 5 percent opacity from fugitive emissions (emissions directly from the receiving pit, not collected by ductwork to the fabric filter)	Minn. R. 7011.1005, subp. 3(A)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of CE001) for any visible emissions, or, during inclement weather, read and record the pressure drop across the baghouse, once each day of operation of EU001.	Title I Condition: Monitoring for 40 CFR Section 52.21(k) limit
C. EMISSION UNIT OPERATION (EU001)	hdr
Clean up commodities spilled on the driveway and other facility property as required to minimize fugitive emissions.	Minn. R. 7011.1005, subp. 1(A)
EU001 shall not be operated between the hours of 8:00 p.m. and 6:00 a.m.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
EU001 may not be operated simultaneously with EU003.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Recordkeeping: Each day, record the date, and the times of all truck traffic through the corn receiving area.	Title I Condition: Recordkeeping for 40 CFR Section 52.21(k) limits
Recordkeeping: Each day of operation of this unit, record the date and the times of operation.	Title I Condition: Recordkeeping for 40 CFR Section 52.21(k) limits
Recordkeeping: The Permittee shall keep complete descriptions of each piece of equipment described by EU001. The description shall include the manufacturer, model number, capacity, and date of original installation. The description shall also identify each piece of equipment using a unique identification (ID) number. The Permittee shall submit updated versions of these descriptions with the Annual Report, or state that there were no changes.	Title I Condition: Recordkeeping for 40 CFR Section 52.21 (k) (changes covered by modeling limits)
The Permittee may make changes to the equipment in the receiving pit, provided the changes are in compliance with all permit requirements. Changes allowed may include replacing individual components with similar components, moving or changing the configuration of components, or adding new components of the type listed in the submittal due 90 days after permit issuance. If a change would increase the capacity of the operation, trigger an applicable limit that is not contained in this permit, or would cause the existing emission limits to be unachievable, or would cause the emission of a different regulated pollutant (other than particulate matter), the change must go through the appropriate procedures under Minn. R. ch. 7007. If a change would require an increase in the PM10 emission limit or would cause the emission of a pollutant other than particulate matter, the facility must be modeled according to the methods required under 40 CFR Section 52.21(l).	Title I Condition: 40 CFR 52.21(k) (changes covered by modeling limits)
D. CONTROL EQUIPMENT OPERATION (CE001 - fabric filter)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control required to meet modeling limit)
Total Particulate Matter: greater than or equal to 80 percent control efficiency	Minn. R. 7011.1005, subp 3(E)
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 8.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k) limit
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

<p>Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit</p>
--	---

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 002 New Corn Receiving Area**

**Associated Items:** EU 003 Corn Receiving (multiple components)

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 3.62 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Particulate Matter < 10 micron: less than or equal to 3.62 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.010 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1005, subp. 3(D)
Opacity: less than or equal to 5 percent opacity from fugitive emissions (emissions directly from the receiving pit, not collected by ductwork to the fabric filter)	Minn. R. 7011.1005, subp. 3(A)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of CE060) for any visible emissions, or, during inclement weather, read and record the pressure drop across the baghouse, two (2) times per calendar week, when the emission unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Performance Test: due before end of each 60 months starting 01/31/2003 to measure (1)total particulate matter emissions and (2)PM10 emissions at the stack. The first test is due January 31, 2003, then every 60 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	(1)Title I Condition: Testing for 40 CFR Section 52.21(j) limit (2) Title I Condition: Testing for 40 CFR Section 52.21(j) and (k) limits (1&2) Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU003)	hdr
Clean up commodities spilled on the driveway and other facility property as required to minimize fugitive emissions.	Minn. R. 7011.1005, subp. 1(A)
EU003 shall not be operated between the hours of 8:00 p.m. and 6:00 a.m.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
EU003 may not be operated simultaneously with EU001.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Recordkeeping: The Permittee shall keep complete descriptions of each piece of equipment described by EU003. The description shall include the manufacturer, model number, capacity, and date of original installation. The description shall also identify each piece of equipment using a unique identification (ID) number. The Permittee shall submit updated versions of these descriptions with the Annual Report, or state that there were no changes.	Title I Condition: 40 CFR Section 52.21(j) & (k) (Recordkeeping of changes covered under BACT and modeling limits)
The Permittee may make changes to the receiving equipment, provided the changes are in compliance with all permit requirements. Changes allowed may include replacing individual components with similar components, moving or changing the configuration of components, or adding new components of the type listed in the submittal due 90 days after permit issuance. If a change would increase the capacity of the operation, trigger an applicable limit that is not contained in this permit, or would cause the existing emission limits to be unachievable, or would cause the emission of a different regulated pollutant (other than particulate matter), the change must go through the appropriate procedures under Minn. R. ch. 7007. If a change would require an increase in the PM10 emission limit or cause the emission of a pollutant other than particulate matter, the facility must be modeled according to the methods required under 40 CFR Section 52.21(l).	Title I Condition: 40 CFR 52.21(j) & (k) (changes covered by BACT and modeling limits)
D. CONTROL EQUIPMENT OPERATION (CE060 - fabric filter)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: CFR Section 52.21(j) (BACT for EU003); 40 CFR Section 52.21(k)
Total Particulate Matter: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) [Also meets the requirements of Minn. R. 7011.1005, subp. 3(E)]
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) & (k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 10.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

<p>Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
--	---

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 003 Corn Cleaner Transfer**

**Associated Items:** EU 004 Corn Cleaner Transfer (multiple components)

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.71 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Particulate Matter < 10 micron: less than or equal to 0.71 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.010 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1005, subp. 3(D)
Opacity: less than or equal to 5 percent opacity from fugitive emissions (emissions directly from EU004, not collected by ductwork to the fabric filter)	Minn. R. 7011.1005, subp. 3(A)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of CE004) for any visible emissions, or, during inclement weather, read and record the pressure drop across the baghouse, two (2) times per calendar week, when the emission unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Initial Performance Test: due 90 days after Permit Issuance to measure (1) total particulate matter and (2) PM10 emissions at the stack.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	(1) Title I Condition: Testing for 40 CFR Section 52.21(j) limit (2) Title I Condition: Testing for 40 CFR Section 52.21(j) and (k) limits and Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU004)	hdr
Recordkeeping: The Permittee shall keep complete descriptions of each piece of equipment described by EU004. The description shall include the manufacturer, model number, capacity, and date of original installation. The description shall also identify each piece of equipment using a unique identification (ID) number. The Permittee shall submit updated versions of these descriptions with the Annual Report, or state that there were no changes.	Title I Condition: 40 CFR 52.21(j) & (k) (changes covered by BACT and modeling limits)
The Permittee may make changes to the corn cleaner transfer equipment, provided the changes are in compliance with all permit requirements. Changes allowed may include replacing individual components with similar components, moving or changing the configuration of components, or adding new components of the type listed in the submittal due 90 days after permit issuance. If a change would increase the capacity of the operation, trigger an applicable limit that is not contained in this permit, or would cause the existing emission limits to be unachievable, or would cause the emission of a different regulated pollutant (other than particulate matter), the change must go through the appropriate procedures under Minn. R. ch. 7007. If a change would require an increase in the PM10 emission limit or would cause the emission of a pollutant other than particulate matter, the facility must be modeled according to the methods required under 40 CFR Section 52.21(l).	Title I Condition: 40 CFR 52.21(j) & (k) (changes covered by BACT and modeling limits)
D. CONTROL EQUIPMENT OPERATION (CE004 - fabric filter)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: CFR Section 52.21(j) (BACT for EU004); 40 CFR Section 52.21(k)
Total Particulate Matter: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) [Also meets the requirements of Minn. R. 7011.1005, subp. 3(E)]
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) & (k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 10.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 004 Corn Cleaner**

**Associated Items: EU 005 Corn Cleaner**

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.46 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Particulate Matter < 10 micron: less than or equal to 0.46 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.010 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1005, subp. 3(D)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of CE044) for any visible emissions, or, during inclement weather, read and record the pressure drop across the baghouse, two (2) times per calendar week, when the emission unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Initial Performance Test: due 90 days after Permit Issuance to measure (1) total particulate matter and (2) PM10 emissions at the stack.	(1) Title I Condition: Testing for 40 CFR Section 52.21(j) limit (2) Title I Condition: Testing for 40 CFR Section 52.21(j) and (k) limits and Minn. R. 7017.2020, subp. 1
For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	
C. EMISSION UNIT OPERATION (EU005) - N/A	hdr
D. CONTROL EQUIPMENT OPERATION (CE044 - fabric filter)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: CFR Section 52.21(j) (BACT for EU005); 40 CFR Section 52.21(k)
Total Particulate Matter: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) [Also meets the requirements of Minn. R. 7011.1005, subp. 3(E)]
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) & (k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 10.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 005 Fines Storage Bin**

**Associated Items: EU 006 Fines Storage Bin**

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.06 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Particulate Matter < 10 micron: less than or equal to 0.06 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.012 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1005, subp. 3(D)
Opacity: less than or equal to 5 percent opacity from fugitive emissions (emissions directly from the bin, not collected by ductwork to the fabric filter)	Minn. R. 7011.1005, subp. 3(A)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of CE062) for any visible emissions, or, during inclement weather, read and record the pressure drop across the baghouse, two (2) times per calendar week, when the emission unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Initial Performance Test: due 90 days after Permit Issuance to measure (1) total particulate matter and (2) PM10 emissions at the stack.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	(1) Title I Condition: Testing for 40 CFR Section 52.21(j) limit (2) Title I Condition: Testing for 40 CFR Section 52.21(j) and (k) limits and Minn. R. Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU006)	hdr
The Permittee shall clean up commodities spilled on the driveway and other facility property as required to minimize fugitive emissions to a level consistent with RACT (reasonably available control technology).	Minn. R. 7011.1005, subp. 1(A)
D. CONTROL EQUIPMENT OPERATION (CE062 - fabric filter)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: CFR Section 52.21(j) (BACT for EU006); 40 CFR Section 52.21(k)
Total Particulate Matter: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) [Also meets the requirements of Minn. R. 7011.1005, subp. 3(E)]
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) & (k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 10.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 006 Millhouse Equipment**

**Associated Items:** EU 007 Existing Millhouse equipment (multiple components)

EU 008 New Millhouse equipment (multiple components)

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 6.00 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 6.00 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.014 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Sulfur Dioxide: less than or equal to 14.97 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Initial Performance Test: due 90 days after Permit Issuance to measure (1)particulate matter and (2)PM10 emissions at the stack.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	(1)Title I Condition: Testing for 40 CFR Section 52.21(j) limit (2)Title I Condition: Testing for 40 CFR Section 52.21(j) and (k) limits and (1&2) Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 07/31/2003 to measure SO2 emissions at the stack. The tests shall be conducted at an interval not to exceed 60 months between test dates. The first test is due July 31, 2003, then every 60 months thereafter.  For additional applicable performance test requirements, see 'General Performance Test Requirements' in Table A, Subject Item "Total Facility".	Title I Condition: Testing for 40 CFR Section 52.21(j) & (k) limits and Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU007, EU008)	hdr
Recordkeeping: The Permittee shall keep complete descriptions of each piece of equipment described by EU007 and EU008. The description shall include the manufacturer, model number, capacity, and date of original installation. The description shall also identify each piece of equipment using a unique identification (ID) number. The Permittee shall submit updated versions of these descriptions with the Annual Report, or state that there were no changes.	Title I Condition: 40 CFR 52.21(j) & (k) (changes covered by BACT and modeling limits)
The Permittee may make changes to the milling equipment, provided the changes are in compliance with all permit requirements. Changes allowed may include replacing individual components with similar components, moving or changing the configuration of components, or adding new components of the type listed in the submittal due 90 days after permit issuance. If a change would increase the capacity of the operation, trigger an applicable limit that is not contained in this permit, or would cause the existing emission limits to be unachievable, or would cause the emission of a different regulated pollutant (other than particulate matter or SO2), the change must go through the appropriate procedures under Minn. R. ch. 7007. If a change would require an increase in the PM10 or SO2 emission limit or would cause the emission of a pollutant other than particulat matter or SO2, the facility must be modeled according to the methods required under 40 CFR Section 52.21(l).	Title I Condition: 40 CFR 52.21(j) & (k) (changes covered by BACT and modeling limits)
D. CONTROL EQUIPMENT OPERATION (CE045 - packed gas absorption column)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: CFR Section 52.21(j) (BACT for EU008); 40 CFR Section 52.21(k)
Total Particulate Matter: greater than or equal to 90 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j)
Particulate Matter < 10 micron: greater than or equal to 90 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) & (k)
Sulfur Dioxide: greater than or equal to 70 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) & (k)
Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 8.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Water flow rate: greater than or equal to 850 gallons/minute and less than or equal to 1300 gallons/minute	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

pH of scrubbing liquid: greater than or equal to 6.0 and less than or equal to 8.0	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Pressure Drop: Once each operating day, read and record pressure drop.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Water Flow Rate: Once each operating day, read and record the water flow rate.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Scrubber Water pH: Once each operating day, read and record the ph.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Corrective Actions: If the recorded pressure drop, water flow rate, or scrubber water ph is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for CE045 and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

Subject Item: **SV 007 Starch Dryer**

Associated Items: EU 009 Starch Dryer #1

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.04 grains/dry standard cubic foot	Title I Condition: To avoid classification of a previous modification as major under 40 CFR Section 52.21 [Also meets the requirements of Minn. R. 7011.0715, subp. 1(A)]
Total Particulate Matter: less than or equal to 7.94 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Particulate Matter < 10 micron: less than or equal to 0.024 grains/dry standard cubic foot	Title I Condition: To avoid classification of a previous modification as major under 40 CFR Section 52.21
Particulate Matter < 10 micron: less than or equal to 7.94 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.009 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Sulfur Dioxide: less than or equal to 23.93 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 01/31/2003 to measure (1)total particulate matter emissions, (2)PM10, and (3)SO2 emissions at the stack. The first test is due January 31, 2003, then every 60 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	(1) Testing for Minn. R. 7009.0200 limit; (1&2) Title I Condition: Testing for synthetic minor limits; (2&3) Title I Condition: Testing for 40 CFR Section 52.21(k) limits; (1,2,&3) Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU009) - N/A	hdr
D. CONTROL EQUIPMENT OPERATION (CE006 - spray tower)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: CFR Section 52.21(k) (use of control required to meet modeling limits)
Total Particulate Matter: greater than or equal to 20 percent control efficiency	Title I Condition: Control required to avoid classification of a previous modification as major under 40 CFR Section 52.21
Particulate Matter < 10 micron: greater than or equal to 20 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Sulfur Dioxide: greater than or equal to 70 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Pressure Drop: greater than or equal to 1.0 inches of water column and less than or equal to 10.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Water flow rate: greater than or equal to 400 gallons/minute and less than or equal to 600 gallons/minute	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
pH of scrubber water: greater than or equal to 2.0 and less than or equal to 6.0	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Pressure Drop: Once each operating day, read and record pressure drop.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Water Flow Rate: Once each operating day, read and record the water flow rate.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Scrubber Water pH: Once each operating day, read and record the scrubber water pH.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Corrective Actions: If the recorded pressure drop, water flow rate, or pH is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for CE006 and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 008 Product Loadout**

**Associated Items:** EU 010 Bin #1

EU 011 Bin #2

EU 012 Bin #3

EU 013 Bin #4

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.35 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 0.35 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.010 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of CE011) for any visible emissions, or, during inclement weather, read and record the pressure drop across the baghouse, once each day of operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(k) limit
C. EMISSION UNIT OPERATION (EU010 - EU013) - N/A	hdr
D. CONTROL EQUIPMENT OPERATION (CE011 - fabric filter)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: CFR Section 52.21(k) (use of control required to meet modeling limit)
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 12.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k) limit
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 009 Germ Dryer**

**Associated Items:** EU 015 Germ Dryer #1

EU 017 Germ Dryer #2

EU 019 Germ Dryer #3

EU 020 Germ Dryer #4

EU 022 Germ Dryer #5

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 2.5 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 2.5 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.016 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Sulfur Dioxide: less than or equal to 5.98 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 01/31/2003 to measure (1) total particulate matter emissions, (2) PM10, and (3) SO2 emissions at the stack. The first test is due January 31, 2003, then every 60 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	(1) Testing for 7009.0200 and 7011.0715 limits; (2&3) Title I Condition: Testing for 40 CFR Section 52.21(k) limits; (1,2,&3) Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU015, EU017, EU019, EU020, EU022) - N/A	hdr
D. CONTROL EQUIPMENT OPERATION (CE012 - spray tower)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: CFR Section 52.21(k) (use of control required to meet modeling limits)
Particulate Matter < 10 micron: greater than or equal to 20 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Sulfur Dioxide: greater than or equal to 70 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 6.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Water flow rate: greater than or equal to 800 gallons/minute and less than or equal to 1400 gallons/minute	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Scrubber water pH: greater than or equal to 6.0 and less than or equal to 8.0	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Pressure Drop: Once each operating day, read and record pressure drop.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Water Flow Rate: Once each operating day, read and record the water flow rate.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of scrubber water pH: Once each operating day, read and record the scrubber water pH.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Corrective Actions: If the recorded pressure drop, water flow rate, or pH is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for CE012 and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 010 Feedhouse Equipment**

**Associated Items:** EU 064 Existing Feedhouse Equipment (multiple components)

EU 065 New Feedhouse Equipment (multiple components)

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 6.00 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 6.00 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.014 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Sulfur Dioxide: less than or equal to 8.98 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 01/31/2003 to measure (1)total particulate matter emissions and (2)PM10, and (3)SO2 emissions at the stack. The first test is due January 31,2003, then every 60 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	(1)Title I Condition: Testing for 40 CFR Section 52.21(j) limit (2&3) Title I Condition: Testing for 40 CFR Section 52.21(j) and (k) limits (1-3) Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU064, EU065)	hdr
Recordkeeping: The Permittee shall keep complete descriptions of each piece of equipment described by EU064 and EU065. The description shall include the manufacturer, model number, capacity, and date of original installation. The description shall also identify each piece of equipment using a unique identification (ID) number. The Permittee shall submit updated versions of these descriptions with the Annual Report, or state that there were no changes.	Title I Condition: 40 CFR 52.21(j) & (k) (changes covered by BACT and modeling limits)
The Permittee may make changes to the feedhouse equipment, provided the changes are in compliance with all permit requirements. Changes allowed may include replacing individual components with similar components, moving or changing the configuration of components, or adding new components of the type listed in the submittal due 90 days after permit issuance. If a change would increase the capacity of the operation, trigger an applicable limit that is not contained in this permit, or would cause the existing emission limits to be unachievable, or would cause the emission of a different regulated pollutant (other than PM, PM10, or SO2), the change must go through the appropriate procedures under Minn. R. ch. 7007. If a change would require an increase in the PM10 or SO2 emission limit or would cause the emission of a pollutant other than particulate matter or SO2, the facility must be modeled according to the methods required under 40 CFR Section 52.21(l).	Title I Condition: 40 CFR 52.21(j) & (k) (changes covered by BACT and modeling limits)
D. CONTROL EQUIPMENT OPERATION (CE046 - packed gas absorption column)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: CFR Section 52.21(j) (BACT for new feedhouse equipment, EU065 )
Total Particulate Matter: greater than or equal to 90 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j)
Particulate Matter < 10 micron: greater than or equal to 90 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) & (k)
Sulfur Dioxide: greater than or equal to 70 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) & (k)
Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 8.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Water flow rate: greater than or equal to 600 gallons/minute and less than or equal to 850 gallons/minute	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
pH of scrubbing liquid: greater than or equal to 6.0 and less than or equal to 8.0	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Pressure Drop: Once each operating day, read and record pressure drop.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

Recordkeeping of Water Flow Rate: Once each operating day, read and record the water flow rate.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Scrubber Water pH: Once each operating day, read and record the pH.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Corrective Actions: If the recorded pressure drop, water flow rate, or scrubber water pH is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for CE045 and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

Subject Item: **SV 011 Gluten Dryer**

Associated Items: EU 028 Gluten Dryer #1

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 17.5 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0610, subp. 1(A)(1)
Particulate Matter < 10 micron: less than or equal to 17.5 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.019 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity , except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
Sulfur Dioxide: less than or equal to 15.0 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 3.07 lbs/hour using an annual average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 90.06 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Performance Test: due before end of each 36 months starting 02/28/2001 to measure (1)NOx, and (2)CO emissions at the stack. The first test is due February 28, 2001, then every 36 months thereafter.  For additional applicable performance test requirements, see 'General Performance Test Requirements' in Table A, Subject Item "Total Facility".	(1-2)Title I Condition: Testing for 40 CFR Section 52.21(j) & (k) limits (1-2) Minn. R. 7017.2020, subp. 1
Performance Test: due 180 days after Permit Issuance to measure (1) total particulate matter emissions, (2) PM10 emissions, and (3) SO2 emissions at the stack.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility."	(1) Title I Condition: Testing for 40 CFR Section 52.21(j) & Minn. R. 7011.0610 limits; (2-3) Title I Condition: Testing for 40 CFR Section 52.21(j) & (k) limits; (1-3) Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU028)	hdr
Fuel Use: Limited to natural gas only.	Title I Condition: 40 CFR Section 52.21(j) (BACT for NOX, CO)
D. CONTROL EQUIPMENT OPERATION (CE021 - spray tower)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: CFR Section 52.21(j) (BACT for PM, PM10, SO2)
Total Particulate Matter: greater than or equal to 20 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j)
Particulate Matter < 10 micron: greater than or equal to 20 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) & (k)
Sulfur Dioxide: greater than or equal to 70 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) & (k)
Pressure Drop: greater than or equal to 1.0 inches of water column and less than or equal to 10.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Water flow rate: greater than or equal to 600 gallons/minute and less than or equal to 1200 gallons/minute	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
pH of scrubber water: greater than or equal to 6.0 and less than or equal to 8.0	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Pressure Drop: Once each operating day, read and record pressure drop.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Water Flow Rate: Once each operating day, read and record the water flow rate.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Scrubber Water pH: Once each operating day, read and record the pH.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

<p>Recordkeeping of Corrective Actions: If the recorded pressure drop, water flow rate, or pH is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for CE021 and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
--	---



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 012 Carbon Furnace #1**

**Associated Items: EU 034 Carbon Furnace #1**

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 1.7 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0610, subp. 1(A)(1)
Particulate Matter < 10 micron: less than or equal to 1.7 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.040 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity , except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
Sulfur Dioxide: less than or equal to 1.11 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 1.87 lbs/hour using an annual average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 223.0 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 02/28/2003 to measure particulate matter emissions at the stack. The first test is due February 28, 2003, and every 60 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Testing for Minn. R. 7009.0200 and 7011.0610 limits; Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 02/28/2003 to measure NOX and SO2 emissions at the stack. The first test is due February 28, 2003, then every 60 months thereafter.  For additional applicable performance test requirements, see 'General Performance Test Requirements' in Table A, Subject Item "Total Facility".	Title I Condition: Testing for 40 CFR Section 52.21(k) limit; Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 36 months starting 02/28/2001 to measure PM10 and CO emissions at the stack. The first test is due February 28, 2001, then every 36 months thereafter.  For additional applicable performance test requirements, see 'General Performance Test Requirements' in Table A, Subject Item "Total Facility".	Title I Condition: Testing for 40 CFR Section 52.21(k) limits; Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU034) - N/A	hdr
D. CONTROL EQUIPMENT OPERATION (CE027 - venturi scrubber)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control equipment required to meet modeling limit)
Particulate Matter < 10 micron: greater than or equal to 90 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Pressure Drop: greater than or equal to 2.0 inches of water column and less than or equal to 15.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Water flow rate: greater than or equal to 25 gallons/minute and less than or equal to 40 gallons/minute	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Pressure Drop: Once each operating day, read and record pressure drop.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Water Flow Rate: Once each operating day, read and record the water flow rate.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Corrective Actions: If the recorded pressure drop or water flow rate is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for CE027 and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 013 Carbon Furnace #2**

**Associated Items: EU 035 Carbon Furnace #2**

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.7 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0610, subp. 1(A)(1)
Particulate Matter < 10 micron: less than or equal to 0.7 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.007 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity , except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
Sulfur Dioxide: less than or equal to 2.00 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 3.38 lbs/hour using an annual average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 4.86 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 02/28/2003 to measure (1)total paticulate matter, (2)PM10, (3)SO2, (4)NOx, and (5)CO emissions at the stack. The first test is due on or before February 28, 2003, then every 60 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	(1)Title I Condition: Testing for 40 CFR Section 52.21(j) limit (2-5)Title I Condition: Testing for 40 CFR Section 52.21(j) and (k) limits (1-5) Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU035)	hdr
Fuel Use: Limited to natural gas only.	Title I Condition: 40 CFR Section 52.21(j) (BACT for NOX, CO, & SO2)
Process Throughput: less than or equal to 1180.83 lbs/hour using 24-hour Block Average of regenerated carbon. Down time of 15 minutes or more is not to be counted as operating time.	Minn. R. 7017.2025
Recordkeeping: Each day, calculate the previous day's usage rate of regenerated carbon, in pounds per hour. Divide the total pounds of regenerated carbon by the hours of operating time. Do not count downtime of 15 minutes or more as operating time.	Minn. R. 7007.0800, subp. 5
D. CONTROL EQUIPMENT OPERATION (CE028 - venturi/impinjet scrubber)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(j) (BACT for PM, PM10)
Total Particulate Matter: greater than or equal to 90 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j)
Particulate Matter < 10 micron: greater than or equal to 90 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) & (k)
Venturi Pressure Drop: greater than or equal to 10.0 inches of water column and less than or equal to 30.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Venturi Water flow rate: greater than or equal to 25 gallons/minute and less than or equal to 40 gallons/minute	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Impinjet Pressure Drop: greater than or equal to 1.0 inches of water column and less than or equal to 8.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Impinjet Water flow rate: greater than or equal to 175 gallons/minute and less than or equal to 250 gallons/minute	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Pressure Drop: Once each operating day, read and record the venturi and impinjet pressure drop.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Water Flow Rate: Once each operating day, read and record the venturi and impinjet water flow rates.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

<p>Recordkeeping of Corrective Actions: If the recorded pressure drops or water flow rates are outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for CE028 and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
--	---

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 014 Carbon Furnace #3**

**Associated Items: EU 036 Carbon Furnace #3**

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.7 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0610, subp. 1(A)(1)
Particulate Matter < 10 micron: less than or equal to 0.7 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.007 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity , except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0610, subp. 1(A)(2)
Sulfur Dioxide: less than or equal to 2.00 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 3.38 lbs/hour using an annual average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 4.86 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 02/28/2003 to measure (1)total paticulate matter, (2)PM10, (3) SO2, (4)NOx, and (5)CO emissions at the stack. The first test is due February 28, 2003, then every 60 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	(1)Title I Condition: Testing for 40 CFR Section 52.21(j) limit (2-5)Title I Condition: Testing for 40 CFR Section 52.21(j) and (k) limits (1-5) Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU036)	hdr
Fuel Use: Limited to natural gas only.	Title I Condition: 40 CFR Section 52.21(j) (BACT for NOX, CO, & SO2)
Process Throughput: less than or equal to 1450.625 lbs/hour using 24-hour Block Average of regenerated carbon. Down time of 15 minutes or more is not to be counted as operating time.	Minn. R. 7017.2025
Recordkeeping: Each day, calculate the previous day's usage rate of regenerated carbon, in pounds per hour. Divide the total pounds of regenerated carbon by the hours of operating time. Do not count downtime of 15 minutes or more as operating time.	Minn. R. 7007.0800, subp. 5
D. CONTROL EQUIPMENT OPERATION (CE029 - venturi/impinjet scrubber)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(j) (BACT for PM, PM10)
Total Particulate Matter: greater than or equal to 90 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j)
Particulate Matter < 10 micron: greater than or equal to 90 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) & (k)
Venturi Pressure Drop: greater than or equal to 10.0 inches of water column and less than or equal to 30.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Venturi Water flow rate: greater than or equal to 25 gallons/minute and less than or equal to 40 gallons/minute	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Impinjet Pressure Drop: greater than or equal to 1.0 inches of water column and less than or equal to 8.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Impinjet Water flow rate: greater than or equal to 175 gallons/minute and less than or equal to 250 gallons/minute	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Pressure Drop: Once each operating day, read and record the venturi and impinjet pressure drops.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Water Flow Rate: Once each operating day, read and record the venturi and impinjet water flow rates.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

<p>Recordkeeping of Corrective Actions: If the recorded pressure drops or water flow rates are outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for CE029 and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
--	---

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 015 Ethanol Plant Scrubbers**

- Associated Items:** EU 037 A Pre-Fermenter  
 EU 038 B Pre-Fermenter  
 EU 039 1A Fermenter  
 EU 040 2A Fermenter  
 EU 041 2B Fermenter  
 EU 042 1B Fermenter  
 EU 043 3A Fermenter  
 EU 044 3B Fermenter  
 EU 045 4A Fermenter  
 EU 046 4B Fermenter  
 EU 047 Distillation/Dehydration #1  
 EU 048 Distillation/Dehydration #2  
 EU 060 Beer Well

What to do	Why to do it
A. EMISSION LIMITS	hdr
Sulfur Dioxide: less than or equal to 0.52 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Initial Performance Test: due 365 days after Permit Issuance to measure sulfur dioxide emissions at the stack.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Title I Condition: Testing for 40 CFR Section 52.21(k) limit and Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU037 - EU048, EU060) - N/A	hdr
D. CONTROL EQUIPMENT OPERATION (CE030 & CE031 - packed gas absorption columns)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control required to meet modeling limit)
Sulfur Dioxide: greater than or equal to 70 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Combined Pressure Drop: greater than or equal to 1.0 inches of water column and less than or equal to 18.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Water flow rate: greater than or equal to 60 gallons/minute and less than or equal to 150 gallons/minute	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Pressure Drop: Once each operating day, read and record pressure drop.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Water Flow Rate: Once each operating day, read and record the water flow rate.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Corrective Actions: If the recorded pressure drop or water flow rate is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for CE030 or CE031 (as appropriate) and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 016 Coal Boilers**

**Associated Items:** EU 049 Coal Boiler #1

EU 050 Coal Boiler #2

MR 001 SO2 Monitor (Coal Boilers)

MR 002 O2 Monitor (Coal Boilers)

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.10 lbs/million Btu heat input using 24-hour Block Average (18 lbs/hour)	Title I Condition: To avoid classification of a previous modification as major under 40 CFR Section 52.21
Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input	Minn. R. 7011.0515, subp. 1
Particulate Matter < 10 micron: less than or equal to 0.06 lbs/million Btu heat input using 24-hour Block Average	Title I Condition: To avoid classification of a previous modification as major under 40 CFR Section 52.21
Particulate Matter < 10 micron: less than or equal to 10.81 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity , except for one six-minute period per hour of not more than 60 percent opacity. (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. 7011.0515, subp. 2
Sulfur Dioxide: less than or equal to 161.8 lbs/hour using 30-day Rolling Average	Title I Condition: To avoid classification of a previous modification as major under 40 CFR Section 52.21
Sulfur Dioxide: less than or equal to 252.22 lbs/hour using 1-Hour Average ( = 1.4 lb/million Btu heat input)	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Sulfur Dioxide: less than or equal to 4 lbs/million Btu heat input using 1-Hour Average	Minn. R. 7011.0515, subp. 1
Nitrogen Oxides: less than or equal to 68.93 lbs/hour using an annual average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 47.94 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 01/31/2003 to measure CO emissions at the stack. The first test is due on or before January 31, 2003, then every 60 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Title I Condition: Testing for 40 CFR Section 52.21(k) limit and Minn. R. 7017.2020, subp. 1, 7017.2030, subp. 4
Performance Test: due before end of each 36 months starting 12/31/2001 to measure NOx emissions at the stack. The first test is due on or before December 31, 2001, then every 36 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Title I Condition: Testing for 40 CFR Section 52.21(k) limit and Minn. R. 7017.2020, subp. 1
Emissions Monitoring: The owner or operator shall use a CEMS to measure sulfur dioxide emissions from the boilers.	Title I Condition: Monitoring of emissions to avoid classification of a previous modification as major under 40 CFR Section 52.21; Minn. R. 7017.1006
C. EMISSION UNIT OPERATION (EU049, EU050)	hdr
Fuel Usage: less than or equal to 51996 tons/year using 12-month Rolling Sum , of coal	Title I Condition: To avoid classification of a previous modification as major under 40 CFR Section 52.21
Recordkeeping: By the 15th day of each month, calculate and record the quantity of coal used during the previous month, and during the previous 12 months (12-month rolling sum).	Title I Condition: To avoid classification of a previous modification as major under 40 CFR Section 52.21
Sulfur Content of Fuel: less than or equal to 1 percent by weight	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Recordkeeping: For each shipment of coal received, maintain records of the sulfur content of the shipment. Records may consist of certification from the coal supplier, or results of an analysis of a sample from the shipment.	Title I Condition: Recordkeeping for 40 CFR Section 52.21(j)
D. CONTROL EQUIPMENT OPERATION (CE032 & CE034 - multiple cyclones; CE033 & CE035 - fabric filters)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control required to meet modeling limit)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

Total Particulate Matter: greater than or equal to 99.8 percent control efficiency	Title I Condition: Control required to avoid classification of a previous modification as major under 40 CFR Section 52.21
Particulate Matter < 10 micron: greater than or equal to 99.8 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
CE032 and CE034 Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 10.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k) limit
CE033 and CE035 Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 10.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k) limit
Recordkeeping: Once each operating day, read and record the pressure drop.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit
Recordkeeping of Corrective Actions: If the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for CE032, CE033, CE034, or CE035 (as appropriate) and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit
E. MONITOR OPERATING REQUIREMENTS (MR001)	hdr
The sulfur dioxide continuous monitoring system (CEMS) shall be operated and data recorded during all periods of operation of the boiler including startup, shutdown and malfunction, except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment.  Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	40 CFR Section 60.13(e)(6); Minn. R. 7017.1090, subp. 1
QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection 30 days after monitor certification. The plan shall contain all of the information required by 40 CFR Section 60, Appendix F, section 3.	Minn. R. 7017.1170, subp. 2
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low level) and upscale (high-level) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR 60, Appendix B. 40 CFR 60, Appendix F, shall be used to determine out-of-control periods for CEMS.	Minn. R. 7017.1170, subp. 3
Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement, or report. Records shall be kept at the source or at the corporate offices in Marshall, MN.	40 CFR Section 60.7(f); Minn. R. 7017.1130
CEMS Relative Accuracy Test Audit (RATA): due before end of each year following CEM Certification Test. If the relative accuracy is 15% or less the next CEMS RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7017.1170, subp. 5
Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA)	Minn. R. 7017.1180, subp. 2
Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA)	Minn. R. 7017.1180, subp. 3
Cylinder Gas Audit: due before end of each calendar half-year following CEM Certification Test. Conduct CGA at least 3 months apart and not greater than 8 months apart. If a RATA is performed during the calendar half-year, then the CGA is not required. Follow the procedures in 40 CFR 60, Appendix F.	Minn. R. 7017.1170, subp. 4
Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter following Cylinder Gas Audit.	Minn. R. 7017.1180, subp. 1



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item:** SV 017 Fly Ash Bin

**Associated Items:** EU 051 Fly Ash Bin

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.03 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 0.03 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.019 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of CE036) for any visible emissions, or, during inclement weather, read and record the pressure drop across the baghouse, two (2) times per calendar week, when the emission unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(k) limit
C. EMISSION UNIT OPERATION (EU051) - N/A	hdr
D. CONTROL EQUIPMENT OPERATION (CE036 - fabric filter)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control required to meet modeling limit)
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 10.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k) limit
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 018 Bottom Ash Bin**

**Associated Items: EU 052 Bottom Ash Bin**

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.03 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 0.03 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.019 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of CE037) for any visible emissions, or, during inclement weather, read and record the pressure drop across the baghouse, two (2) times per calendar week, when the emission unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(k) limit
C. EMISSION UNIT OPERATION (EU052) - N/A	hdr
D. CONTROL EQUIPMENT OPERATION (CE037 - fabric filter)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control required to meet modeling limit)
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 10.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k) limit
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 019 Boiler #3**

**Associated Items:** EU 053 Boiler #3

MR 003 NOx Monitor (Boiler #3)

MR 004 O2 Monitor (Boiler #3)

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.0095 lbs/million Btu heat input using 24-hour Block Average (1.7 lb/hr)	Title I Condition: To avoid classification of a previous modification as major under 40 CFR Section 52.21
Particulate Matter < 10 micron: less than or equal to 0.0095 lbs/million Btu heat input using 24-hour Block Average	Title I Condition: To avoid classification of a previous modification as major under 40 CFR Section 52.21
Particulate Matter < 10 micron: less than or equal to 1.7 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Sulfur Dioxide: less than or equal to 0.3 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 0.125 lbs/million Btu heat input using an annual average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Nitrogen Oxides: less than or equal to 22.31 lbs/hour using an annual average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 0.1 lbs/million Btu heat input using 30-day Rolling Average calculated using the 1-hour average emission rates measured by the continuous nitrogen oxides monitor. This limit applies at all times including periods of startup, shutdown, or malfunction.	40 CFR Section 60.44b(a)(1)(i); 40 CFR Section 60.44b(h) & (j); 40 CFR Section 60.46b(a); 40 CFR Section 60.48b(d); Minn. R. 7011.0565
Carbon Monoxide: less than or equal to 28.53 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
The Permittee must calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxide emissions discharged to the atmosphere, and record the output of the system.	40 CFR Section 60.48b(b); Minn. R. 7011.0565; Minn. R. 7017.1006
30-day Performance Test to measure NOx emissions, upon request.	40 CFR Section 60.46b(e)(4); Minn. R. 7011.0565
C. EMISSION UNIT OPERATION and REPORTING (EU053)	hdr
Fuel Use: Limited to natural gas only	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Recordkeeping: Each operating day, record the quantity of natural gas combusted and all of the information listed in 40 CFR 60.49b(g).	40 CFR Section 60.49b(d); 40 CFR Section 60.49b(g); Minn. R. 7011.0565
Records of Startup, Shutdown, or Malfunction: The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the boiler; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.	40 CFR Section 60.7(b)
D. CONTROL EQUIPMENT OPERATION	hdr
Burner requirements: Low-NOx burners	Title I Condition: 40 CFR Section 52.21(j) (BACT)
E. MONITOR OPERATING REQUIREMENTS (MR003)	hdr
The nitrogen oxide continuous monitoring system (CEMS) shall be operated and data recorded during all periods of operation of the boiler including startup, shutdown and malfunction, except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment.  Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	40 CFR Section 60.48b(c); 40 CFR Section 60.13(e)(6); Minn. R. 7011.0565; Minn. R. 7017.1090, subp. 1
The 1-hour average nitrogen oxides emission rates measured shall be expressed in units of lb/million Btu heat input and shall be used to calculate the average emission rates required under 40 CFR Section 60.44b.	40 CFR Section 60.48b(d); Minn. R. 7011.0565
Span Value: 500 ppm	40 CFR Section 60.48b(e)(2); Minn. R. 7011.0565
QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection 30 days after monitor certification. The plan shall contain all of the information required by 40 CFR Section 60, Appendix F, section 3.	40 CFR pt. 60, Appendix F, section 3; Minn. R. 7017.1170, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

<p>CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR 60, Appendix B. 40 CFR 60, Appendix F, shall be used to determine out-of-control periods for CEMS.</p>	<p>40 CFR Section 60, Appendix F, section 4.1; 40 CFR Section 60.13(d)(1); Minn. R. 7017.1170, subp. 3</p>
<p>Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement, or report. Records shall be kept at the source or at the corporate office in Marshall, MN.</p>	<p>40 CFR Section 60.7(f); Minn. R. 7017.1130</p>
<p>CEMS Relative Accuracy Test Audit (RATA): due before end of each year following CEM Certification Test. Follow the procedures in 40 CFR pt. 60, Appendix F.</p>	<p>40 CFR pt. 60, Appendix F, section 5.1.1; Minn. R. 7017.1170, subp. 5</p>
<p>Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA).</p>	<p>Minn. R. 7017.1180, subp. 2</p>
<p>Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA).</p>	<p>Minn. R. 7017.1180, subp. 3; 40 CFR Section 60, Subpart Db; 40 CFR Section 60, Appendix F, Section 1</p>
<p>Cylinder Gas Audit: due before end of each calendar quarter following CEM Certification Test but in no more than three calendar quarters per calendar year. The RATA shall be conducted during the calendar quarter in which a CGA is not performed.</p>	<p>40 CFR Section 60, Appendix F, section 5.1.2; Minn. R. 7017.1170, subp. 4</p>
<p>Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter following Cylinder Gas Audit.</p>	<p>40 CFR 60, Subpart Db; 40 CFR 60, Appendix F, section1; Minn. R. 7017.1180, subp. 1</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 020 Boiler #4**

**Associated Items:** EU 054 Boiler #4

MR 005 NOx Monitor (Boiler #4)

MR 006 O2 Monitor (Boiler #4)

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.0084 lbs/million Btu heat input using 24-hour Block Average (2.0 lb/hr)	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Particulate Matter < 10 micron: less than or equal to 0.0084 lbs/million Btu heat input using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Particulate Matter < 10 micron: less than or equal to 2.0 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Sulfur Dioxide: less than or equal to 0.4 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 24.1 lbs/hour using an annual average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 0.1 lbs/million Btu heat input using 30-day Rolling Average calculated using the 1-hour average emission rates measured by the continuous nitrogen oxides monitor. This limit applies at all times including periods of startup, shutdown, or malfunction.	40 CFR Section 60.44b(a)(1)(i); 40 CFR Section 60.44b(h) & (i); 40 CFR Section 60.46b(a); 40 CFR Section 60.48b(d); Minn. R. 7011.0565
Carbon Monoxide: less than or equal to 38.56 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Performance Test: due before end of each 36 months starting 01/31/2001 to measure PM10 emissions. The first test is due January 31, 2001, then every 36 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Title I Condition: Testing for 40 CFR Section 52.21(j) limits and Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 01/31/2003 to measure total particulate matter, NOx, and CO emissions. The tests shall be conducted at an interval not to exceed 60 months between test dates. The first test is due on or before January 31, 2003, then every 60 months, thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Title I Condition: Testing for 40 CFR Section 52.21(j) limit and Minn. R. 7017.2020, subp. 1
30-day Performance Test to measure NOx emissions, upon request.	40 CFR Section 60.46b(e)(4); Minn. R. 7011.0565
The Permittee must calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxide emissions discharged to the atmosphere, and record the output of the system.	40 CFR Section 60.48b(b); Minn. R. 7011.0565; Minn. R. 7017.1006
C. EMISSION UNIT OPERATION and REPORTING (EU054)	hdr
Fuel Use: Limited to natural gas only	Title I Condition: 40 CFR Section 52.21(j) (BACT for PM, PM10, and SO2)
Recordkeeping: Each operating day, record the quantity of natural gas combusted and all of the information listed in 40 CFR 60.49b(g).	40 CFR Section 60.49b(d); 40 CFR Section 60.49b(g); Minn. R. 7011.0565
Records of Startup, Shutdown, or Malfunction: The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the boiler; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.	40 CFR Section 60.7(b)
D. CONTROL EQUIPMENT OPERATION	hdr
Burner requirements: Low-NOx multistage combustion with induced flue gas recirculation	Title I Condition: 40 CFR Section 52.21(j) (BACT for CO and NOx)
E. MONITOR OPERATING REQUIREMENTS (MR005)	hdr
The nitrogen oxide continuous monitoring system (CEMS) shall be operated and data recorded during all periods of operation of the boiler including startup, shutdown and malfunction, except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment.	40 CFR Section 60.48b(c); 40 CFR Section 60.13(e)(6); Minn. R. 7011.0565; Minn. R. 7017.1090, subp. 1
Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.	

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

The 1-hour average nitrogen oxides emission rates measured shall be expressed in units of lb/million Btu heat input and shall be used to calculate the average emission rates required under 40 CFR Section 60.44b.	40 CFR Section 60.48b(d); Minn. R. 7011.0565
Span Value: 500 ppm	40 CFR Section 60.48b(e)(2); Minn. R. 7011.0565
QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection 30 days after monitor certification. The plan shall contain all of the information required by 40 CFR Section 60, Appendix F, section 3.	40 CFR pt. 60, Appendix F, section 3; Minn. R. 7017.1170, subp. 2
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR 60, Appendix B. 40 CFR 60, Appendix F, shall be used to determine out-of-control periods for CEMS.	40 CFR Section 60, Appendix F, section 4.1; 40 CFR Section 60.13(d)(1); Minn. R. 7017.1170, subp. 3
Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement, or report. Records shall be kept at the source or at the corporate offices in Marshall, MN.	40 CFR Section 60.7(f); Minn. R. 7017.1130
CEMS Relative Accuracy Test Audit (RATA): due before end of each year following CEM Certification Test. Follow the procedures in 40 CFR pt. 60, Appendix F.	40 CFR pt. 60, Appendix F, section 5.1.1; Minn. R. 7017.1170, subp. 5
Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA)	Minn. R. 7017.1180, subp. 2
Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA)	Minn. R. 7017.1180, subp. 3; 40 CFR Section 60, Subpart Db; 40 CFR Section 60, Appendix F, Section 1
Cylinder Gas Audit: due before end of each calendar quarter following CEM Certification Test but in no more than three calendar quarters per calendar year. The RATA shall be conducted during the calendar quarter in which a CGA is not performed.	40 CFR Section 60, Appendix F, section 5.1.2; Minn. R. 7017.1170, subp. 4
Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter following Cylinder Gas Audit.	40 CFR 60, Subpart Db; 40 CFR 60, Appendix F, section1; Minn. R. 7017.1180, subp. 1

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item:** SV 021 Generator**Associated Items:** EU 055 Generator

What to do	Why to do it
A. EMISSION LIMITS	hdr
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input	Minn. R. 7011.2300, subp. 2
B. EMISSION TESTING AND MONITORING REQUIREMENTS -- N/A	hdr
C. EMISSION UNIT OPERATION (EU055)	hdr
May only be used in times of total or partial power loss, or for routine testing. May not be a regular power source for routine plant operation.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Recordkeeping: Record the date and times that the generator is operated.	Title I Condition: Recordkeeping for 40 CFR Section 52.21(k); Minn. R. 7007.3000
D. CONTROL EQUIPMENT OPERATION -- N/A	hdr

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 022 WastewaterTreatment Plant Flare**

**Associated Items:** EU 056 Anaerobic Reactor #1

EU 062 Anaerobic Reactor #2

What to do	Why to do it
A. EMISSION LIMITS	hdr
Sulfur Dioxide: less than or equal to 0.29 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 0.55 lbs/hour using an annual average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 2.96 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS -- N/A	hdr
C. EMISSION UNIT OPERATION (EU056 & EU062) -- N/A	hdr
D. CONTROL EQUIPMENT OPERATION (CE038 - flare)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control required to meet modeling limit)



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item:** SV 023 Product Transfer

**Associated Items:** EU 029 Transfer operation

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 1.71 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 1.71 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.005 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of EU029) for any visible emissions two (2) times per calendar week, when the unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Initial Performance Test: due 90 days after Permit Issuance to measure (1) total particulate matter and (2) PM10 emissions.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	(1)Title I Condition: Testing for 40 CFR Section 52.21(j) limit; (2)Title I Condition: Testing for 40 CFR Section 52.21(j) and (k) limits; (1&2) Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU029)	hdr
Recordkeeping of Visible Emissions: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Corrective Actions: If visible emissions are observed, the Permittee shall begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
D. CONTROL EQUIPMENT OPERATION - N/A	hdr

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 024 Corn Silos #7-#11**

**Associated Items:** EU 057 Corn Receiving Silo #7

EU 058 Corn Receiving Silo #8

EU 059 Corn Receiving Silo #9

EU 066 Corn Receiving Silo #10

EU 067 Corn Receiving Silo #11

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.18 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Particulate Matter < 10 micron: less than or equal to 0.18 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.011 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1005, subp. 3(D)
Opacity: less than or equal to 5 percent opacity from fugitive emissions (emissions directly from the unit, not collected by ductwork to the fabric filter)	Minn. R. 7011.1005, subp. 3(A)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of CE061) for any visible emissions, or, during inclement weather, read and record the pressure drop across the baghouse, two (2) times per calendar week, when the emission unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(j)
C. EMISSION UNIT OPERATION (EU057 - EU059, EU066, EU067)	hdr
The Permittee shall clean up commodities spilled on the driveway and other facility property as required to minimize fugitive emissions to a level consistent with RACT (reasonably available control technology).	Minn. R. 7011.1005, subp. 1(A)
D. CONTROL EQUIPMENT OPERATION (CE061 - fabric filter)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(j) (BACT)
Total Particulate Matter: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) [Also meets the requirements of Minn. R. 7011.1005, subp. 3(E)]
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(j) & (k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 10.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item:** SV 029 Corn Fines Transfer

**Associated Items:** EU 068 Corn Fines Transfer

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.14 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit)
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 0.14 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.009 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of EU068) for any visible emissions two (2) times per calendar week, when the unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(j) & (k)
Initial Performance Test: due 90 days after Permit Issuance to measure (1) total particulate matter and (2) PM10 emissions at the stack.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	(1) Title I Condition: Testing for 40 CFR Section 52.21(j) limit; (2) Title I Condition: Testing for 40 CFR Section 52.21(j) and (k) limits; (1&2) Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU068)	hdr
Recordkeeping of Visible Emissions: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Corrective Actions: If visible emissions are observed, the Permittee shall begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
D. CONTROL EQUIPMENT OPERATION - N/A	hdr

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 030 Rotary Cooler**

- Associated Items:** EU 023 Rotary Cooler  
 EU 119 Dryer #2 Baghouse  
 EU 120 Dryer #3 Baghouse  
 EU 121 Dryer #4 Baghouse  
 EU 122 Dryers #5 & #6 Baghouse

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 3.57 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 3.57 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.011 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack for any visible emissions, or, during inclement weather, read and record the pressure drop across the baghouse, two (2) times per calendar week, when the emission units are in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Initial Performance Test: due 365 days after Permit Issuance to measure total particulate matter emissions  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Minn. R. 7009.0200 (Testing for permit limit) and Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 365 days after Permit Issuance to measure PM10 emissions  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Title I Condition: Testing for 40 CFR Section 52.21(k) limit and Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU023, EU119, EU120, EU121, EU122)	hdr
Recordkeeping of Visible Emissions: The Permittee shall record the time and date of each visible emission inspection and whether or not any visible emissions were observed.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Corrective Actions: If visible emissions are observed, the Permittee shall begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
D. CONTROL EQUIPMENT OPERATION (CE016 - Fabric Filter)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control equipment required to meet modeling limits)
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21 (k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 8.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 033 Fiber Dewatering & Chemical Storage**

**Associated Items:** EU 107 Chemical Storage/Fiber Dewatering System

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.6 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 0.6 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.007 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Sulfur Dioxide: less than or equal to 0.49 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Initial Performance Test: due 365 days after Permit Issuance to measure total particulate matter emissions  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Minn. R. 7009.0200 (Testing for permit limit) and Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 365 days after Permit Issuance to measure PM10 and SO2 emissions  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Title I Condition: Testing for 40 CFR Section 52.21(k) limit and Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU107) -- N/A	hdr
D. CONTROL EQUIPMENT OPERATION (CE069 - packed gas absorption column)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control required to meet modeling limit)
Particulate Matter < 10 micron: greater than or equal to 90 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Sulfur Dioxide: greater than or equal to 70 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 4.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Water flow rate: greater than or equal to 100 gallons/minute and less than or equal to 200 gallons/minute	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
pH of scrubber water: greater than or equal to 6.0 and less than or equal to 8.0	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Pressure Drop: Once each operating day, read and record pressure drop.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Water Flow Rate: Once each operating day, read and record the water flow rate.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of pH: Once each operating day, read and record the pH.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Corrective Actions: If the recorded pressure drop, water flow rate, or pH is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for CE069 and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 034 Loadout Building**

- Associated Items:** EU 010 Bin #1  
 EU 011 Bin #2  
 EU 012 Bin #3  
 EU 013 Bin #4  
 EU 024 Bin #5  
 EU 025 Bin #6  
 EU 026 Bin #7  
 EU 027 Bin #10  
 EU 030 Bin #8  
 EU 031 Bin #9

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.21 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 0.21 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.018 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the roof vent (SV034) for any visible emissions, or, during inclement weather, read and record the pressure drop across each of the baghouses, two (2) times per calendar week, when the emission units are in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
C. EMISSION UNIT OPERATION (EU010 - EU013, EU024 - EU027, EU030, EU031) - N/A	hdr
D. CONTROL EQUIPMENT OPERATION (CE007 - CE010, CE017 - CE020, CE023, CE024 - fabric filters)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control equipment required to meet modeling limits)
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 10.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item:** SV 035 Storage Silo

**Associated Items:** EU 061 Lime Storage Tank

EU 109 Storage Silo

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.08 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 0.08 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.010 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of CE071) for any visible emissions, or, during inclement weather, read and record the pressure drop across the baghouse, two (2) times per calendar week, when the emission unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
C. EMISSION UNIT OPERATION (EU061& EU109) -- N/A	hdr
D. CONTROL EQUIPMENT OPERATION (CE071 - fabric filter)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control equipment required to meet modeling limits)
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 4.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 036 Lime Storage Silo**

**Associated Items: EU 110 Lime Storage Silo**

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.13 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 0.13 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.010 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of CE072) for any visible emissions, or, during inclement weather, read and record the pressure drop across the baghouse, two (2) times per calendar week, when the emission unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
C. EMISSION UNIT OPERATION (EU110) -- N/A	hdr
D. CONTROL EQUIPMENT OPERATION (CE072 - fabric filter)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control equipment required to meet modeling limits)
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 5.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 037 Soda Ash Storage Silo**

**Associated Items: EU 111 Soda Ash Storage Silo**

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.13 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 0.13 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000)
Particulate Matter < 10 micron: less than or equal to 0.010 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of CE073) for any visible emissions, or, during inclement weather, read and record the pressure drop across the baghouse, two (2) times per calendar week, when the emission unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
D. EMISSION UNIT OPERATION (EU111) -- N/A	hdr
E. CONTROL EQUIPMENT OPERATION (CE073 - fabric filter)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control equipment required to meet modeling limits)
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 5.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item:** SV 038 WWTP Package Boiler

**Associated Items:** EU 113 WWTP Package Boiler

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.01 lbs/hour using 24-hour Block Average (0.015 lbs/ million Btu heat input) This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input	Minn. R. 7011.0515, subp. 1
Particulate Matter < 10 micron: less than or equal to 0.01 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.015 lbs/million Btu heat input	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity , except for one six-minute period per hour of not more than 60 percent opacity. (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. 7011.0515, subp. 2
Sulfur Dioxide: less than or equal to 0.01 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 0.1 lbs/hour using an annual average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 0.04 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS -- N/A	hdr
C. EMISSION UNIT OPERATION (EU113)	hdr
Fuel Use: Limited to natural gas only, by equipment design	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
D. CONTROL EQUIPMENT OPERATION -- N/A	hdr

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 039 Natural Gas Heater**

**Associated Items: EU 114 Natural Gas Heater**

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.01 lbs/hour using 24-hour Block Average (0.005 lbs/ million Btu heat input) This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 0.01 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.005 lbs/million Btu heat input using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Sulfur Dioxide: less than or equal to 0.01 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Nitrogen Oxides: less than or equal to 0.2 lbs/hour using an annual average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Carbon Monoxide: less than or equal to 0.13 lbs/hour using 1-Hour Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS -- N/A	hdr
C. EMISSION UNIT OPERATION (EU114)	hdr
Fuel Use: Limited to natural gas only, by equipment design	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
D. CONTROL EQUIPMENT OPERATION -- N/A	hdr

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: SV 041 Soda Ash Blending**

**Associated Items: EU 116 Soda Ash Blending**

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.04 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 0.04 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.008 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of EU116) for any visible emissions, or, during inclement weather, read and record the pressure drop across the unit, two (2) times per calendar week, when the unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(k) limit
C. EMISSION UNIT OPERATION (EU116)	hdr
Operation and Maintenance of Fabric Filter: The Permittee shall conduct all necessary maintenance and make all necessary attempts to keep the unit in proper operating condition at all times. The Permittee shall operate and maintain the unit according to the equipment manufacturer's specifications or the Operation and Maintenance Plan developed by the Permittee.	Title I Condition: Monitoring for 40 CFR Section 52.21(j)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 5.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k) limit
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit
The Permittee shall inspect the unit according to manufacturer's specifications or an Operation and Maintenance Plan developed by the Permittee and maintain a written record of the inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 2 and subp. 14
D. CONTROL EQUIPMENT OPERATION - N/A	hdr

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item:** SV 043 Soda Ash Bin

**Associated Items:** EU 118 Soda Ash Bin

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.1 lbs/hour using 24-hour Block Average This is a state only requirement and is not enforceable under the Clean Air Act by the EPA Administrator or by the citizens.	Minn. R. 7009.0200
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas from control equipment, or the allowable concentration at the actual flow rate, as described in Minn. R. 7011.0735, or the allowable emission rate at the actual process weight rate, as described in Minn. R. 7011.0730.	Minn. R. 7011.0715, subp. 1(A)
Particulate Matter < 10 micron: less than or equal to 0.1 lbs/hour using 24-hour Block Average	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Particulate Matter < 10 micron: less than or equal to 0.009 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Visible Emissions: The Permittee shall check the stack (outlet of CE077) for any visible emissions, or, during inclement weather, read and record the pressure drop across the baghouse two (2) times per calendar week, when the emission unit is in operation.	Title I Condition: Monitoring for 40 CFR Section 52.21(k) limit
C. EMISSION UNIT OPERATION (EU118) -- N/A	hdr
D. CONTROL EQUIPMENT OPERATION (CE077 - fabric filter)	hdr
Control equipment shall be operated at all times that the associated emission units are in operation.	Title I Condition: 40 CFR Section 52.21(k) (use of control required to meet modeling limit)
Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Title I Condition: Control required for 40 CFR Section 52.21(k)
Pressure Drop: greater than or equal to 0.1 inches of water column and less than or equal to 5.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k) limit
Recordkeeping of Visible Emissions or Pressure Drop: The Permittee shall record the time and date of each visible emission inspection or pressure drop reading, and whether or not any visible emissions were observed, or whether or not the observed pressure drop was within the range specified herein.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit
Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop is outside the required operating range, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and begin corrective actions as soon as possible (within 24 hours) to correct the problem. The Permittee shall keep a record of the corrective actions taken.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: TK 001 Ethanol (1080TK01)**

<b>What to do</b>	<b>Why to do it</b>
Recordkeeping: Maintain records showing the dimensions of the tank and an analysis showing the tank capacity. These records shall be maintained for the life of the source.	40 CFR Section 60.116b(b); Minn. R. 7011.1520(C)
Recordkeeping: Maintain records showing the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of the VOL during the respective storage period, calculated as described in 40 CFR Section 116b(e).	40 CFR Section 60.116b(c); Minn. R. 7011.1520(C)
Notification: Within 30 days of each occurrence, notify the Commissioner when the maximum true vapor pressure exceeds 5.2 kPa.	40 CFR Section 60.116b(d); Minn. R. 7011.1520(C)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: TK 002 Ethanol (1080TK02)**

<b>What to do</b>	<b>Why to do it</b>
Recordkeeping: Maintain records showing the dimensions of the tank and an analysis showing the tank capacity. These records shall be maintained for the life of the source.	40 CFR Section 60.116b(b); Minn. R. 7011.1520(C)
Recordkeeping: Maintain records showing the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of the VOL during the respective storage period, calculated as described in 40 CFR Section 116b(e).	40 CFR Section 60.116b(c); Minn. R. 7011.1520(C)
Notification: Within 30 days of each occurrence, notify the Commissioner when the maximum true vapor pressure exceeds 5.2 kPa.	40 CFR Section 60.116b(d); Minn. R. 7011.1520(C)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: TK 003 Denaturant (gasoline) (1080TK04)**

What to do	Why to do it
A. POLLUTION CONTROL REQUIREMENTS	hdr
The storage vessel shall be equipped with a fixed roof in combination with an internal floating roof meeting the specifications of paragraph (a)(1) of this section.	40 CFR Section 60.112b(a); Minn. R. 7011.1520(C)
The internal floating roof shall be equipped with the following closure devices between the wall of the storage vessel and the edge of the internal floating roof: (B) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.	40 CFR Section 60.112b(a)(1)(ii)(B); Minn. R. 7011.1520(C)
B. MONITORING REQUIREMENTS	hdr
Visually inspect the internal floating roof, the primary seal, and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill as required by this paragraph.	40 CFR Section 60.113b(a)(3)(ii); Minn. R. 7011.1520(C)
Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed as required by this paragraph. In no event shall inspections conducted in accordance with this provision occur at intervals greater than five (5) years.	40 CFR Section 60.113b(a)(3)(i); Minn. R. 7011.1520(C)
C. RECORDKEEPING REQUIREMENTS	hdr
Recordkeeping: Maintain records showing the dimensions of the tank and an analysis showing the tank capacity. These records shall be maintained for the life of the source.	40 CFR Section 60.116b(b); Minn. R. 7011.1520(C)
Keep a record of each inspection performed as required by 40 CFR Section 60.113b(a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).	40 CFR Section 60.115b(a)(2); Minn. R. 7011.1520(C)
D. REPORTING REQUIREMENTS	hdr
After each inspection required by 40 CFR Section 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR Section 60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR Section 60.112b(a)(1) or 40 CFR Section 60.113b(a)(3)(ii) and list each repair made.	40 CFR Section 60.115b(a)(4); Minn. R. 7011.1520(C)
Notification: If an inspection is required (under 40 CFR Section 60.113b(a)(1) or 40 CFR Section 60.113b(a)(3)(i)), notify the Administrator in writing at least 30 days prior to filling or refilling of the storage vessel, to afford the Administrator the opportunity to have an observer present. If the inspection is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to refilling the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to refilling.	40 CFR Section 60.115b(a)(5); Minn. R. 7011.1520(C)



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: TK 005 Ethanol (1080TK03)**

<b>What to do</b>	<b>Why to do it</b>
Recordkeeping: Maintain records showing the dimensions of the tank and an analysis showing the tank capacity. These records shall be maintained for the life of the source.	40 CFR Section 60.116b(b); Minn. R. 7011.1520(C)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: TK 006 Ethanol (1080TK06)**

<b>What to do</b>	<b>Why to do it</b>
Recordkeeping: Maintain records showing the dimensions of the tank and an analysis showing the tank capacity. These records shall be maintained for the life of the source.	40 CFR Section 60.116b(b); Minn. R. 7011.1520(C)
Recordkeeping: Maintain records showing the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of the VOL during the respective storage period, calculated as described in 40 CFR Section 116b(e).	40 CFR Section 60.116b(c); Minn. R. 7011.1520(C)
Notification: Within 30 days of each occurrence, notify the Commissioner when the maximum true vapor pressure exceeds 5.2 kPa.	40 CFR Section 60.116b(d); Minn. R. 7011.1520(C)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

**Subject Item: TK 015 Denatured Ethanol (1080TK07)**

What to do	Why to do it
A. POLLUTION CONTROL REQUIREMENTS	hdr
The storage vessel shall be equipped with a fixed roof in combination with an internal floating roof meeting the specifications of paragraph (a)(1) of this section.	40 CFR Section 60.112b(a); Minn. R. 7011.1520(C)
The internal floating roof shall be equipped with the following closure devices between the wall of the storage vessel and the edge of the internal floating roof: (B) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.	40 CFR Section 60.112b(a)(1)(ii)(B); Minn. R. 7011.1520(C)
B. MONITORING REQUIREMENTS	hdr
Visually inspect the internal floating roof, the primary seal, and the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill as required by this paragraph.	40 CFR Section 60.113b(a)(3)(ii); Minn. R. 7011.1520(C)
Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed as required by this paragraph. In no event shall inspections conducted in accordance with this provision occur at intervals greater than five (5) years.	40 CFR Section 60.113b(a)(3)(i); Minn. R. 7011.1520(C)
C. RECORDKEEPING REQUIREMENTS	hdr
Recordkeeping: Maintain records showing the dimensions of the tank and an analysis showing the tank capacity. These records shall be maintained for the life of the source.	40 CFR Section 60.116b(b); Minn. R. 7011.1520(C)
Keep a record of each inspection performed as required by 40 CFR Section 60.113b(a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).	40 CFR Section 60.115b(a)(2); Minn. R. 7011.1520(C)
D. REPORTING REQUIREMENTS	hdr
After each inspection required by 40 CFR Section 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR Section 60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR Section 60.112b(a)(1) or 40 CFR Section 60.113b(a)(3)(ii) and list each repair made.	40 CFR Section 60.115b(a)(4); Minn. R. 7011.1520(C)
Notification: If an inspection is required (under 40 CFR Section 60.113b(a)(1) or 40 CFR Section 60.113b(a)(3)(i)), notify the Administrator in writing at least 30 days prior to filling or refilling of the storage vessel, to afford the Administrator the opportunity to have an observer present. If the inspection is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to refilling the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to refilling.	40 CFR Section 60.115b(a)(5); Minn. R. 7011.1520(C)

**TABLE B: SUBMITTALS**

08/08/00

Facility Name: Minnesota Corn Processors LLC  
Permit Number: 08300038 - 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**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit Submit all permit applications to the Air Quality Permit Technical Advisor, Minnesota Pollution Control Agency, Metro District/Major Facilities, 520 Lafayette Road North, St. Paul, MN 55155	Total Facility
Equipment List	due 90 days after Permit Issuance. Include all emission units described by EU001, EU003, EU004, EU007, EU008, EU064, and EU065, with their unique ID numbers.	Total Facility
Testing Frequency Plan	due 60 days after Initial Performance Test for particulate matter and PM10. The plan shall specify a testing frequency based on test data and MPCA guidance. Future performance tests based on year (12-month), 36 month, or 60-month intervals, or as applicable, shall be required upon written approval of MPCA.	SV003, SV004, SV005, SV006, SV023, SV029, SV030
Testing Frequency Plan	due 60 days after Initial Performance Test for particulate matter, PM10, and SO2. The plan shall specify a testing frequency based on test data and MPCA guidance. Future performance tests based on year (12-month), 36 month, or 60-month intervals, or as applicable, shall be required upon written approval of MPCA.	SV033
Testing Frequency Plan	due 60 days after Initial Performance Test for sulfur dioxide. The plan shall specify a testing frequency based on test data and MPCA guidance. Future performance tests based on year (12-month), 36 month, or 60-month intervals, or as applicable, shall be required upon written approval of MPCA.	SV015

**TABLE B: RECURRENT SUBMITTALS**

08/08/00

Facility Name: Minnesota Corn Processors LLC

Permit Number: 08300038 - 001

What to send	When to send	Portion of Facility Affected
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter following Permit Issuance (use Deviations Reporting Form DRF-1 as amended). The EER must contain all of the information requested in 40 CFR Section 60.7(c). The EER shall indicate all periods of monitor bypass and all periods of exceedances of the limit including exceedances allowed during startup, shutdown, and malfunction.	SV016
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter following Permit Issuance (use Deviations Reporting Form DRF-1 as amended). The EER must contain all of the information requested in 40 CFR Section 60.7(c). The EER shall indicate all periods of monitor bypass and all periods of exceedances of the limit including exceedances allowed during startup, shutdown, and malfunction.	SV019
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter following Permit Issuance (use Deviations Reporting Form DRF-1 as amended). The EER must contain all of the information requested in 40 CFR Section 60.7(c). The EER shall indicate all periods of monitor bypass and all periods of exceedances of the limit including exceedances allowed during startup, shutdown, and malfunction.	SV020
Quarterly Report	due 30 days after end of each calendar quarter following Permit Issuance. Report must contain all of the information listed in 40 CFR 60.49b(g).	SV019
Quarterly Report	due 30 days after end of each calendar quarter following Permit Issuance. Report must contain all of the information listed in 40 CFR 60.49b(g).	SV020
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. The report shall be sent to: Air Quality Compliance Tracking Coordinator, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, MN 55155	Total Facility
Compliance Certification	due 30 days after end of each calendar year following Permit Issuance (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner, and to the U.S. EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.  The EPA copy shall be sent to: Mr. George Czerniak, Chief, Air Enforcement and Compliance Assurance Branch, Air and Radiation Division, EPA Region V, 77 West Jackson Boulevard, Chicago, Illinois 60604.  The MPCA copy shall be sent to: Air Quality Compliance Tracking Coordinator, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, MN 55155.	Total Facility

## Appendix I – Modeled Parameters

**Facility: Minnesota Corn Processors**  
**Permit Number: 08300038-001**

The following stack parameters were used in the February 29, 2000 model. Revision of any of these parameters must result in plume dispersion characteristics equivalent to or better than the plume dispersion characteristics modeled and summarized in the model dated February 29, 2000. Revision of any of these parameters may require a major amendment.

**Table I.1 – Modeled Parameters For Scenario 1: No Operation of SV001**

SV ID No.	Modeled Height (feet)	Modeled Diameter <sup>1</sup> (feet)	Modeled Air Flow (acfm)	Direction of Flow	Modeled Temperature (°F)	Modeled PM <sub>10</sub> (lb/hr)	Modeled SO <sub>2</sub> (lb/hr)	Modeled NO <sub>x</sub> (lb/hr)	Modeled CO (lb/hr)
002	201.12	3.74	40876	Vertical	50	3.62			
003	125.98	1.608	8000*	Horizontal	50	0.71			
004	120.08	1.509	5264	Vertical	50	0.46			
005	45.01	0.394	599	Vertical	50	0.06			
006	195.87	4.003	50059	Vertical	120	6.0	14.97		
007	150.59	4.987	105427	Vertical	100	7.94	23.93		
008	102.36	1.148	4000*	Horizontal	60	0.35			
009	165.03	2.986	17833	Vertical	120	2.5	5.98		
010	149.93	4.003	50059	Vertical	120	6.0	8.98		
011	184.06	8.235	105578	Vertical	150	17.5	15.0	3.07	90.00
012	150.00	1.181	4926	Vertical	350	1.7	1.11	1.87	223.0
013	138.78	2.001	12013	Vertical	350	0.7	2.0	3.38	4.86
014	138.78	2.001	12013	Vertical	350	0.7	2.0	3.38	4.86
015	79.99	1.509	4859	Vertical	89	N/A	0.52		
016	200.13	5.512	74305	Vertical	350	10.81	252.22	68.93	47.94
017	60.04	0.558	188*	Down	50	0.03			
018	60.04	0.656	188*	Horizontal	50	0.03			

<b>SV ID No.</b>	<b>Modeled Height (feet)</b>	<b>Modeled Diameter <sup>1</sup> (feet)</b>	<b>Modeled Air Flow (acfm)</b>	<b>Direction of Flow</b>	<b>Modeled Temperature (°F)</b>	<b>Modeled PM<sub>10</sub> (lb/hr)</b>	<b>Modeled SO<sub>2</sub> (lb/hr)</b>	<b>Modeled NO<sub>x</sub> (lb/hr)</b>	<b>Modeled CO (lb/hr)</b>
019	150.00	4.987	53329	Vertical	343	1.7	0.30	22.34	28.53
020	150.00	5.315	76343	Vertical	370	2.0	0.40	24.10	38.6
022	14.99	1.247	5527	Vertical	1700	N/A	0.29	0.55	2.96
023	139.11	4.003	38046	Vertical	69	1.71			
024	123.36	0.656	2000*	Horizontal	50	0.18			
025	115.16	0.492	850*	Horizontal	50	0.07			
026	115.16	0.492	850*	Horizontal	50	0.07			
027	115.16	0.492	850*	Horizontal	50	0.07			
028	115.16	0.492	850*	Horizontal	50	0.07			
029	81.04	0.984	1750*	Horizontal	99	0.14			
030	145.01	3.510	37820	Vertical	107	3.57			
031	115.16	0.492	850*	Horizontal	50	0.07			
032	115.16	0.492	850*	Horizontal	50	0.07			
033	68.90	2.001	10013	Vertical	90	0.6	0.49		
034	101.05	4.987	1384	Vertical	60	0.21			
035	34.45	0.427	900*	Horizontal	50	0.08			
036	48.88	0.591	1500*	Down	50	0.13			
037	49.87	0.591	1500*	Down	50	0.13			
038	49.87	0.656	268	Vertical	450	0.01	0.01	0.10	0.04
039	15.42	1.673	922	Vertical	350	0.01	0.01	0.20	0.13
041	80.05	0.427	564	Vertical	50	0.04			
043	95.14	0.492	1356	Vertical	50	0.1			

<sup>1</sup> If the stack is not round (i.e., it is rectangular), this is the equivalent diameter used in the modeling analysis

\* This is not the number that was modeled, but is the number supplied by the applicant. When a source exhausts horizontally or downward, the air flow is modeled as a very low number, on the order of zero. However, "0" does not reflect the air flow that the source truly experiences.



**Table I.2 – Modeled Parameters For Scenario 2: Operation of SV001**

SV ID No.	Modeled Height (feet)	Modeled Diameter <sup>1</sup> (feet)	Modeled Air Flow (acfm)	Direction of Flow	Modeled Temperature (°F)	Modeled PM <sub>10</sub> (lb/hr)	Modeled SO <sub>2</sub> (lb/hr)	Modeled NO <sub>x</sub> (lb/hr)	Modeled CO (lb/hr)
001	8.0	2.33	12000*	Horizontal	50	0.881			
002	201.12	3.74	40876	Vertical	50	0.00			
003	125.98	1.608	8000*	Horizontal	50	0.71			
004	120.08	1.509	5264	Vertical	50	0.46			
005	45.01	0.394	599	Vertical	50	0.06			
006	195.87	4.003	50059	Vertical	120	6.0	14.97		
007	150.59	4.987	105427	Vertical	100	7.94	23.93		
008	102.36	1.148	4000*	Horizontal	60	0.35			
009	165.03	2.986	17833	Vertical	120	2.5	5.98		
010	149.93	4.003	50059	Vertical	120	6.0	8.98		
011	184.06	8.235	105578	Vertical	150	17.5	15.0	3.07	90.00
012	150.00	1.181	4926	Vertical	350	1.7	1.11	1.87	223.0
013	138.78	2.001	12013	Vertical	350	0.7	2.0	3.38	4.86
014	138.78	2.001	12013	Vertical	350	0.7	2.0	3.38	4.86
015	79.99	1.509	4859	Vertical	89	N/A	0.52		
016	200.13	5.512	74305	Vertical	350	10.81	252.22	68.93	47.94
017	60.04	0.558	188*	Down	50	0.03			
018	60.04	0.656	188*	Horizontal	50	0.03			
019	150.00	4.987	53329	Vertical	343	1.7	0.30	22.34	28.53
020	150.00	5.315	76343	Vertical	370	2.0	0.40	24.10	38.6
022	14.99	1.247	5527	Vertical	1700	N/A	0.29	0.55	2.96
023	139.11	4.003	38046	Vertical	69	1.71			
024	123.36	0.656	2000*	Horizontal	50	0.18			
025	115.16	0.492	850*	Horizontal	50	0.07			
026	115.16	0.492	850*	Horizontal	50	0.07			

<b>SV ID No.</b>	<b>Modeled Height (feet)</b>	<b>Modeled Diameter <sup>1</sup> (feet)</b>	<b>Modeled Air Flow (acfm)</b>	<b>Direction of Flow</b>	<b>Modeled Temperature (°F)</b>	<b>Modeled PM<sub>10</sub> (lb/hr)</b>	<b>Modeled SO<sub>2</sub> (lb/hr)</b>	<b>Modeled NO<sub>x</sub> (lb/hr)</b>	<b>Modeled CO (lb/hr)</b>
027	115.16	0.492	850*	Horizontal	50	0.07			
028	115.16	0.492	850*	Horizontal	50	0.07			
029	81.04	0.984	1750*	Horizontal	99	0.14			
030	145.01	3.510	37820	Vertical	107	3.57			
031	115.16	0.492	850*	Horizontal	50	0.07			
032	115.16	0.492	850*	Horizontal	50	0.07			
033	68.90	2.001	10013	Vertical	90	0.6	0.49		
034	101.05	4.987	1384	Vertical	60	0.21			
035	34.45	0.427	900*	Horizontal	50	0.08			
036	48.88	0.591	1500*	Down	50	0.13			
037	49.87	0.591	1500*	Down	50	0.13			
038	49.87	0.656	268	Vertical	450	0.01	0.01	0.10	0.04
039	15.42	1.673	922	Vertical	350	0.01	0.01	0.20	0.13
041	80.05	0.427	564	Vertical	50	0.04			
043	95.14	0.492	1356	Vertical	50	0.1			

<sup>1</sup> If the stack is not round (i.e., it is rectangular), this is the equivalent diameter used in the modeling analysis

\* This is not the number that was modeled, but is the number supplied by the applicant. When a source exhausts horizontally or downward, the air flow is modeled as a very low number, on the order of zero. However, "0" does not reflect the air flow that the source truly experiences.

## Appendix II -- Insignificant Activities Required to be Listed, and Likely Applicable Requirements

**Facility: Minnesota Corn Processors**  
**Permit Number: 08300038-001**

Note: Several activities which may ordinarily be listed here as insignificant activities are listed in Table A of the permit, with associated Title I conditions.

Minn. R. 7007.1300, subpart	Rule Description of the Activity, and the Actual Activity	Likely Applicable Requirement
3(A)	Fuel use: space heaters fueled by, kerosene, natural gas, or propane	
	<ul style="list-style-type: none"> <li>• Fifteen (15) natural gas space heater vents</li> </ul>	Minn. R. 7011.0510/0515
3(G)	Emissions from a laboratory, as defined in the subpart.	
	<ul style="list-style-type: none"> <li>• Five (5) QA/QC Lab vents – minimal PM or VOC emissions</li> </ul>	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.	
	<ul style="list-style-type: none"> <li>• Twenty-three (23) pressure relief valves – minimal emissions of SO<sub>2</sub>, VOC or PM</li> </ul>	Minn. R. 7011.0710/0715
	<ul style="list-style-type: none"> <li>• Five (5) chemical room roof vents</li> </ul>	Minn. R. 7011.0710/0715
	<ul style="list-style-type: none"> <li>• Twenty (20) non-VOC storage tanks – minimal emissions of SO<sub>2</sub> or PM (acid mists)</li> </ul>	Minn. R. 7011.0710/0715
	<ul style="list-style-type: none"> <li>• Five (5) miscellaneous vents venting small quantities of SO<sub>2</sub></li> </ul>	none

**TECHNICAL SUPPORT DOCUMENT**  
**For**  
**DRAFT AIR EMISSION PERMIT NO. 08300038-001**

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

## **1. General Information**

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

Applicant/Address	Stationary Source/Address (SIC Code: 2046)
Minnesota Corn Processors, LLC 901 North Highway 59 Marshall, MN 56258	Minnesota Corn Processors, LLC 400 West Erie Road Marshall, Lyon County, MN
Contact: Mike Rutledge, Environmental Manager 901 North Highway 59 Marshall, MN 56258  (507)537-2676 (507)537-2642 (fax)	

### **1.2. Description of the facility**

Minnesota Corn Processors (MCP) operates a wet corn mill and ethanol production facility in Marshall, Minnesota. The facility mills and processes corn to produce corn starch, gluten, germ, feed, and ethanol. See Attachment C to this document for a complete list of the facility equipment and operations.

### **1.3 Description of previous Air Emission Permits**

**April 7, 1992** -- Air Emission Permit, No. 1939-91-OT-2 (the most recent total facility permit). That permit authorized operation of all equipment that existed at the time. It included synthetic minor limits and BACT limitations set in previous permits, as well as limits pursuant to Minnesota state rules. The permit also authorized a modification – expansion of the ethanol production capability.

**June 4, 1993** -- Air Emission Permit No. 1939-93-P-1. That permit was a “pronto permit” (a permit type no longer in use for Air Emission Permits) authorizing replacement of an SO<sub>2</sub> monitor, which required a permit under the rules at that time.

**August 9, 1995** -- Amendment No. 1 to Air Emission Permit No. 1939-91-OT-2 (Air Emission Permit No. 08300038-019). That permit authorized a PSD modification to the facility (a large facility expansion) and set several BACT limits.

**December 12, 1997** -- Amendment No. 2 to Air Emission Permit No. 1939-91-OT-2 (Air Emission Permit No. 08300038-021). That permit modified Amendment No. 1, since the scope and description of the modification changed following issuance of Amendment No. 1.

**June 17, 1999** -- Amendment No. 3 to Air Emission Permit No. 1939-91-OT-2. That amendment allowed changes to some of the ranges of monitored parameters of control equipment. No physical facility modifications were authorized.

#### 1.4 Description of any changes allowed by this permit issuance

This permit authorizes no physical changes to emission units located at the facility. This permit does authorize changes to some of the existing emission limits to reflect information gleaned during stack testing or ambient air modeling. (In the cases of BACT limits, the actual BACT technology is unchanged, just the emissions allowed). The permit also requires modification of any existing physical stack parameters to match the parameters modeled and listed in Appendix I to the permit.

**Table 1. Emission Limit Changes**

Pollutant	SV	Previous Limit	New Limit	Increase (Decrease)	Comments
<b>PM<sub>10</sub></b>	011	11.8 lb/hr	17.5 lb/hr	5.7 lb/hr	Revise BACT limit following testing and air dispersion modeling
	012	0.74 lb/hr	1.7 lb/hr	0.96 lb/hr	Revise limit following testing and air dispersion modeling (The original limit is listed as a "synthetic minor limit" in error; it is not a synthetic minor limit, and therefore can be changed.)
	013	1.33 lb/hr	0.70 lb/hr	(0.63) lb/hr	Revise BACT limit following testing and air dispersion modeling
	014	1.33 lb/hr	0.70 lb/hr	(0.63) lb/hr	Revise BACT limit following testing and air dispersion modeling
	017	0.02 lb/hr	0.03 lb/hr	0.01 lb/hr	Revise modeling limit to reflect new stack parameters and air dispersion modeling
	018	0.02 lb/hr	0.03 lb/hr	0.01 lb/hr	Revise modeling limit to reflect new stack parameters and air dispersion modeling
	019	0.52 lb/hr	1.70 lb/hr	1.18 lb/hr	Revise modeling limit to reflect new stack parameters and air dispersion modeling. (The original limit is a synthetic minor limit. While the limit is being relaxed, the modification remains minor.)
	020	0.72 lb/hr	2.00 lb/hr	1.28 lb/hr	Revise BACT limit following testing and air dispersion modeling
	033	0.78 lb/hr	0.60 lb/r	(0.18) lb/hr	Revise modeling limit to reflect new stack parameters and air dispersion modeling
	<b>Total permitted PM<sub>10</sub> change =</b>				<b>7.7 lb/hr = 33.7 tpy</b>
<b>PM</b>	011	11.8 lb/hr	17.5 lb/hr	5.7 lb/hr	Revise BACT limit following testing and PM <sub>10</sub> dispersion modeling
	012	0.74 lb/hr	1.7 lb/hr	0.96 lb/hr	Revise limit following testing and air dispersion modeling (The original limit is listed as a "synthetic minor limit" in error; it is not a synthetic minor limit, and therefore can be changed.)

Pollutant	SV	Previous Limit	New Limit	Increase (Decrease)	Comments
	013	1.33 lb/hr	0.70 lb/hr	(0.63) lb/hr	Revise BACT limit following testing
	014	1.33 lb/hr	0.70 lb/hr	(0.63) lb/hr	Revise BACT limit following testing
	017	0.02 lb/hr	0.03 lb/hr	0.01 lb/hr	Revised to match PM <sub>10</sub> limit (since PM <sub>10</sub> is a subset of PM)
	018	0.02 lb/hr	0.03 lb/hr	0.01 lb/hr	Revised to match PM <sub>10</sub> limit (since PM <sub>10</sub> is a subset of PM)
	019	0.86 lb/hr	1.70 lb/hr	0.84 lb/hr	Revise limit to match PM <sub>10</sub> limit. (The original limit is a synthetic minor limit. While the limit is being relaxed, the modification remains minor.)
	020	1.16 lb/hr	2.00 lb/hr	0.84 lb/hr	Revise BACT limit following testing
	033	0.78 lb/hr	0.60 lb/r	(0.18) lb/hr	Revised to match PM <sub>10</sub> limit (since PM <sub>10</sub> is a subset of PM)
<b>Total permitted PM change =</b>				<b>6.92 lb/hr = 30.3 tpy</b>	
<b>SO<sub>2</sub></b>	011	3.15 lb/hr	15.0 lb/hr	11.85 lb/hr	Revise BACT limit following testing and air dispersion modeling.
	019	0.10 lb/hr	0.30 lb/hr	0.20 lb/hr	Revise modeling limit to reflect new stack parameters and air dispersion modeling. (Originally set equal to PTE.)
	020	0.14 lb/hr	0.40 lb/hr	0.26 lb/hr	Revise BACT limit following revision of stack parameters (Originally set equal to PTE. BACT technology is unchanged.)
<b>Total permitted SO<sub>2</sub> change =</b>				<b>12.3 lb/hr = 53.9 tpy</b>	
<b>CO</b>	011	6.01 lb/hr	90.0 lb/hr	84.0 lb/hr	Revise BACT limit following testing and air dispersion modeling.
	012	2.71 lb/hr	223.0 lb/hr	220.0 lb/hr	Revise BACT limit following testing and air dispersion modeling.
<b>Total permitted CO change =</b>				<b>304.0 lb/hr = 1333.0 tpy</b>	
<b>NO<sub>x</sub></b>	016	59.93 lb/hr	68.93 lb/hr	<b>9.0 lb/hr = 39.4 tpy</b>	Revise limit following testing and air dispersion modeling.

**Table 2: Stack Parameter Changes**

SV	Previous Height (feet)	New Height (feet)	Previous Direction	New Direction	Previous Dimensions (feet)	New Dimensions (feet)	Previous Air Flow (acfm)	New Air Flow (acfm)
001					2.0 (D)	1.92 x 2.92	10,000	12,000
002	140	201					40,800	41,100
003	180	126			1.5 x 2.0	1.5 (D)	115,000	8,000
004							5,300	5,200
005			Horizontal	Vertical	0.58 (D)	0.41 (D)	520	650

SV	Previous Height (feet)	New Height (feet)	Previous Direction	New Direction	Previous Dimensions (feet)	New Dimensions (feet)	Previous Air Flow (acfm)	New Air Flow (acfm)
006	119	196						
007	150	150.5					105,000	106,000
008	90	102.5			1.0 (D)	1.16 (D)		
009							17,800	18,000
010	135	150						
011	174	184			8.3 (D)	8.25 (D)		
012	115	150			1.2 (D)	1.19 (D)		
013	135	138.83			1.33 (D)	2.0 (D)	112,000	12,000
014	135	138.83			1.33 (D)	2.0 (D)	112,000	12,000
015	40	80			2.0 (D)	1.5 (D)		
016							74,200	74,000
017			Vertical	Down	0.25 (D)	0.66 (D)	150	188
018			Vertical	Horizontal	1.0 x 0.5	0.625 x 0.375	150	188
019	110	150					53,300	53,600
020	110	150						
022							5,300	5,600
023	125	139.1						
024	230	123.5			0.75 (D)	0.65(D)		
029							4,250	1,750
033	68	69						
034	90	101			0.43 (D)	5.0 (D)	2,000	1,400
035	35	34.5						
036	50	49	Horizontal	Down				
037			Horizontal	Down				
038							300	279
039	15	15.5					925	920

### 1.5. Facility Emissions:

**Table 3. Total Facility Potential to Emit Summary:**

*Note: For details on emissions from individual units or stacks, refer to Appendix B to this document.*

	PM tpy	PM <sub>10</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> Tpy	CO tpy	VOC tpy	Total HAPs tpy
Total Facility Limited Potential Emissions	445.8	316.9	1041.7	542.2	1931.8	93.9	12.1
Total Facility Actual Emissions*	146.18	111.25	123.99	282.36	582.36	58.26	NR**

\* As reported in the 1997 Emission Inventory

\*\* NR = Not Reported

**Table 4. Facility and Permit Classification**

Classification	Major/Affected Source	*Synthetic Minor	*Minor
PSD (PM, PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , CO)	<b>X</b>		
NAAR - <b>N/A</b>			
Part 70 Permit Program (PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , VOC)	<b>X</b>		

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



## **2. Regulatory Overview of the Facility**

### New Source Review

The facility is an existing major source under New Source Review – Prevention of Significant Deterioration (PSD, 40 CFR § 52.21). During the facility's existence, it has also taken limits to avoid major source classification of specific modifications under PSD. The last physical changes made that were subject to PSD were authorized in Air Emission Permit No. 08300038-021, which was issued on December 12, 1997.

### Part 70 Permit Program

The facility is a major source under the federal operating permits program (40 CFR pt. 70). MCP submitted a timely Title V application. The application was due on April 15, 1995 and was received by the MPCA on January 17, 1995. A revised application including the changes authorized in Air Emission Permit Nos. 08300038-019 and 08300038-021 was submitted on January 11, 1999.

### New Source Performance Standards (NSPS)

- 40 CFR § 60, Subpart Db -- Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

40 CFR 60.40b (a) – The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 100 million Btu/hour.

Boilers #3 and #4 are subject to this regulation.

- 40 CFR § 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)

40 CFR 60.110b (a) -- ...the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 40 cubic meters that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984.

Tanks 001-003, 005, 006, and 015 are subject (in varying degrees, depending on tank size and contents) to this regulation.

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

The facility is not subject to any of the proposed or promulgated NESHAPs. No changes affecting the emissions of any of the listed HAPs are being made at the facility.

### Minnesota State Rules

Several State Standards of Performance apply to portions of this facility and are included in the permit. These include:

- Minn. R. 7011.1000 through 7011.1015 - Bulk Agricultural Commodity Facilities
- Minn. R. 7011.0500 through 7011.0553 – New Indirect Heating Fossil-Fuel-Burning Equipment
- Minn. R. 7011.0600 through 7011.0625 – New Direct Heating Fossil-Fuel-Burning Equipment
- Minn. R. 7011.0700 through 7011.0735 – Post 1969 Industrial Process Equipment
- Minn. R. 7011.2300 – Stationary Internal Combustion Engines

See Attachment C to this document for a complete list of the specific permit limits and their bases (Emission Limit History and Form CD-01).

**Table 5. Regulatory Summary**

Level*	Applicable Regulations	Comments:
TF	40 CFR § 52.21(k); Minn. R. 7007.3000	Modeling Requirements – The permit requires ambient air impact modeling of the facility for all changes or modifications affecting NO <sub>x</sub> , CO, and SO <sub>2</sub> , for which equivalent or better dispersion characteristics cannot be shown (compared to the final model summarized in Attachment A to this document), and for all modifications affecting PM <sub>10</sub> .
TF	40 CFR § 52.21(k)	<p>Modeling Limits: Each stack is subject to emission limits and stack parameter requirements used in the air dispersion modeling demonstrating the NAAQS and MAAQs are protected. Most of the limits have been carried forward from Air Emission Permit No. 08300038-021; some have been adjusted to reflect the model dated February 29, 2000.</p> <p>The facility consumes a very large portion of the PM<sub>10</sub> increment for the area. For this reason, much additional modeling is required (PM<sub>10</sub> must be modeled for every modification made, whether or not a permit is required). PM<sub>10</sub> limits are listed in lb/hr and gr/acf. The lb/hr limit represents the maximum emission rate. The gr/acf limit represents the variability allowed at different air flow rates, to ensure that the worst modeled case is not exceeded. The concentration is in terms of actual conditions (vs. dry standard conditions) because moisture contents are variable.</p>
SV001, SV007, SV008, SV009, SV012, SV017, SV018, SV030, SV033, SV034, SV035, SV036, SV038, SV039, SV041, SV043	Minn. R. 7009.0200	Minnesota Ambient Air Quality Standards: PM limits for these stacks were previously (in prior permits) listed as “modeling limits,” when in fact PM has not been modeled for the facility. The modeled PM <sub>10</sub> emission rates were compared to the MAAQS and PM limits were subsequently set equal to the PM <sub>10</sub> modeled emissions as protective of the MAAQS.

Level*	Applicable Regulations	Comments:
TF; EU001, EU003, EU004, EU007, EU008, EU064, EU065	Minn. R. 7007.0800, subp. 5	Equipment List – The permit requires the submittal and subsequent maintenance of a list of all individual pieces of equipment that comprise each of the listed EUs. Each of these EUs is actually a process within which individual components are frequently rearranged, replaced, and/or “swapped out”. This is to avoid listing potentially 100s of individual units and frequently amending the permit. See also Section 3.2 of this document.
SV001	40 CFR § 52.21(k)	Modeling Limits: May not operate between 8:00 p.m. and 6:00 a.m. The modeling demonstrated protectiveness of the NAAQS and MAAQS when this activity was limited to 6:00 a.m. to 8:00 p.m.
SV002 -- SV006. SV010, SV011, SV013, SV014, SV016, SV019, SV020, SV023, SV024, SV029,	40 CFR § 52.21(j)	Prevention of Significant Deterioration/Best Available Control Technology (PSD/BACT) Limits: Each of these stacks is an exhaust point for units that in the past have been part of a PSD modification. The requirement for BACT and associated emission and operating limits have been carried forward from previous permits. See also Section 3.1 of this document.
SV007, SV012, SV016, SV019,	40 CFR § 52.21	Prevention of Significant Deterioration (PSD): Limits taken to avoid major source classification under PSD for previous facility modifications.  Most of these are conditions carried forward from Amendment Nos. 4 and 6 to Air Emission Permit No. 1939-88-OT-1, with some additional monitoring requirements added. The limits for SV012 were revised in Air Emission Permit No. 08300038-021 after an analysis showing that with the revised limit, the original modification remained non-major (as described in the technical support document for that permit). SV019 limits are revised in this permit action, and the original modification likewise remains minor.
SV006 -- SV010, SV017, SV018, SV023, SV029, SV030, SV033 – SV037, SV041, SV043	Minn. R. 7011.0715	Standards of Performance for Post 1969 Industrial Process Equipment.: The permit contains PM and opacity emission limits required under this rule. Since all of the stacks are also subject to either PSD or modeling limits under 40 CFR § 52.21 and already require monitoring and/or testing, no additional monitoring or testing is required under this rule.

Level*	Applicable Regulations	Comments:
SV011 -- SV014	Minn. R. 7011.0610	<p>Standards of Performance for New Direct Heating Equipment: The permit contains PM and opacity emission limits required under this rule. Since all of the stacks are also subject to either PSD or modeling limits under 40 CFR § 52.21 and already require monitoring and/or testing, no additional monitoring or testing is required under this rule.</p> <p>The starch dryer (under SV007) and germ dryers (under SV009) are not fuel combustion units, and therefore are not subject to this rule; they are instead subject to the Standards of Performance for Post 1969 Industrial Process Equipment.</p> <p>The natural gas heater (SV039) is not used for “processing a material” and therefore is not subject to this rule; it is instead subject to the Standards of Performance for New Indirect Heating Equipment, since the intent of that rule is to limit emissions from combustion.</p>
SV016, SV038, SV039	Minn. R. 7011.0515	<p>Standards of Performance for New Indirect Heating Equipment: The permit contains PM and opacity emission limits required under this rule. Since all of the stacks are also subject to either PSD or modeling limits under 40 CFR § 52.21 and already require monitoring and/or testing, no additional monitoring or testing is required under this rule.</p>
SV021	Minn. R. 7011.2300	<p>Standards of Performance for Stationary Internal Combustion Engines: The permit includes the rule requirements. Since the unit is an emergency generator, it was not included in the modeling analysis, and therefore does not have additional modeling limits.</p>
SV001 – SV005, SV024 – SV028, SV031, SV032	Minn. R. 7011.1005	<p>Standards of Performance for Dry Bulk Agricultural Commodity Facilities: The permit contains opacity limitations and control efficiency requirements prescribed by this rule (80% efficiency for PM control). Since all of the stacks are also subject to either PSD or modeling limits under 40 CFR § 52.21 and have more efficient control equipment (baghouses, generally accepted to be 99% efficient), no additional monitoring or testing is required under this rule.</p> <p>The units subject to this rule were installed in 1983. While this is after the promulgation date of the New Source Performance Standard for Grain Elevators (NSPS Subpart DD, August 3, 1978), the storage capacity of the grain storage elevator, as defined at 40 CFR 60.301(f), is less than 1 million bushels, so NSPS Subpart DD does not apply (40 CFR 60.304(b)(4)).</p>
SV013, SV014	Minn. R. 7017.2025	<p>Operational Requirements and Limitations – This permit incorporates operational limits imposed following performance testing. Under the cited rule, an emission unit tested at less than worst-case operating conditions may not be operated at a higher rate than tested unless another test is conducted.</p>

Level*	Applicable Regulations	Comments:
SV019, SV020	40 CFR 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units: The permit contains operating requirements and emission limits as prescribed in the regulation.  The units subject to this rule (EU053 and EU054) are each monitored by a NO <sub>x</sub> monitor and an O <sub>2</sub> monitor. Only the NO <sub>x</sub> monitor is required by Subpart Db; therefore, only the NO <sub>x</sub> monitor has specific requirements addressed by the permit.
TK001, TK002, TK003, TK005, TK006, TK015	40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels): The permit contains operating requirements as prescribed in the regulation.

\*Level --- EU = emission unit, GP = group, TF = total facility, SV = stack/vent, CE = control equipment, TK = tank

### **3. Technical Information**

#### **3.1 BACT Applicability**

Since the issuance of Air Emission Permit No. 08300038-021, revisions to some of the limits designated as BACT (Best Available Control Technology) have been requested as a result of information gathered during performance testing. The BACT limits initially set were estimated based on what was thought to be achievable at the time of the PSD modification, since there is no published information on emission rates for several of these types of processes. Performance testing has been completed on many of the units, and in some of those cases the previously set BACT limits were shown to be unachievable. This permit modifies some of the limits to reflect what has been measured. (See Table 1 for details.)

The actual BACT control technology is not changed (i.e. the original BACT determination is not changed), and there is no physical modification to the processes. Additional modeling has also been done to determine compliance with National and Minnesota Ambient Air Quality Standards (NAAQS and MAAQS). As a result, the permit contains federally enforceable emission limits and stack parameter requirements for both BACT and NAAQS/MAAQS purposes.

A summary of modeling parameters and results and an MPCA memo stating that the modeling results are acceptable are attached as Attachment A to this document.

#### **3.2 Pre-authorized Changes**

The permit pre-authorizes certain changes that might otherwise be considered modifications under state and federal rules.

Changes are allowed at the Corn Receiving Pits and transfer equipment (EU001, EU003, and EU004), the New and Existing Millhouse Equipment (EU007 and EU008), and the New and Existing Feedhouse Equipment (EU064 and EU065).

This permit pre-authorizes the following types of changes as long as all permit conditions are met and as long as no new applicable requirements are triggered:

- Replacement of equipment subject to “wear and tear;”
- Moving or reconfiguration of equipment;
- Addition of equipment of the type listed in the original list submitted

If a change would increase the capacity of the operation, trigger an applicable requirement that is not already listed in the permit as applicable to that EU, cause the existing emission limits to be unachievable, or would cause the emission of an additional regulated pollutant, the change must go through the appropriate amendment procedure under Minn. R. ch. 7007.

If a change would require an increase in the PM<sub>10</sub> emission limit or result in the emission of any additional pollutant, the facility must be modeled.

### 3.3 Potential to Emit Calculations

Attachment B to this document includes a summary of the potential to emit of the facility, individual calculations for those units for which PTE is based on emission factors and equipment capacity, and a summary of the origin of the permitted emission limits. Supporting documentation prepared by the MPCA and the Permittee is also included.

Criteria Pollutant Emissions: The maximum numbers in Table 1 are limited by both operating limits and pollutant-specific emission limits contained in the permit.

Hazardous Air Pollutant (HAP) Emissions: Total and individual HAPs are limited only by operating conditions of the permit (limits on quantity of coal combusted, and limiting remaining combustion units to natural gas only).

### 3.4 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. To achieve this objective, US EPA issued guidance (September 15, 1998, memorandum Periodic Monitoring Guidance for Title V Operating Permits Programs) on periodic monitoring requirements for permitted sources.

In evaluating the monitoring included in the permit, the MPCA considered the following as per the September 15, 1998, guidance:

- the likelihood of violating the applicable requirement;
- whether add-on controls are necessary to meet the emission limit;
- 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.

Table 6 summarizes the periodic monitoring requirements (note: insignificant activities are evaluated in Attachment D to this document).

**Table 6. Periodic Monitoring Requirements**

Emission Unit	Requirement (Basis)	Additional Monitoring	Discussion
<b>All</b>	Maintain modeled parameters	None	Changes to modeled stack parameters (height, diameter, air flow, air temp) must be requested in writing. Any change to any stack emitting PM <sub>10</sub> must be remodeled. If PM <sub>10</sub> is not involved, better dispersion must be demonstrated or remodeling will be required.

Emission Unit	Requirement (Basis)	Additional Monitoring	Discussion
<b>SV001</b> EU001 (& CE001)	Control equipment must control PM emissions by 80% (Dry Bulk Agricultural Commodity (DBAC) Rule)	Check for visible emissions (VE) each day of use.  If VE check not possible, read and record pressure drop.  Keep records of corrective actions taken.	CE001 is a fabric filter baghouse, which is generally expected to exceed 80% efficiency when properly operated and maintained.  Visible emissions are a better indication of a malfunction in a baghouse; a tear can occur and the pressure drop may not change significantly, but visible emissions will likely result.  This unit is only used in the event of catastrophic failure of EU003.
	Not to be operated between 8:00 p.m. and 6:00 a.m. or simultaneously with EU003 (modeling)	Recordkeeping of dates and times of operation	
	PM & PM <sub>10</sub> emission limits (modeling)	None	Assuming 99% control (baghouse) and using equipment capacity and AP-42 emission factors, controlled emissions are well below the lb/hr limits. Noncompliance is unlikely.
<b>SV002</b> EU003 (& CE060)	Operate and maintain control equipment in order to meet limits. (BACT)  Control equipment must control PM emissions by 80% (DBAC Rule)	See "Low-Temp Fabric Filters" section of this table.	CE060 is a fabric filter baghouse, which is generally expected to exceed 80% efficiency when properly operated and maintained.
	Not to be operated between 8:00 p.m. and 6:00 a.m. or simultaneously with EU001 (modeling)	Recordkeeping of dates and times of operation	
	PM & PM <sub>10</sub> emission limits (BACT)	Test schedule is based on results of completed stack testing.	Initial performance test completed 1/28/98.

Emission Unit	Requirement (Basis)	Additional Monitoring	Discussion
<p><b>SV003</b> EU004 (&amp; CE004)</p> <p><b>SV004</b> EU005 (&amp; CE044)</p> <p><b>SV005</b> EU006 (&amp; CE062)</p>	<p>Operate and maintain control equipment in order to meet limits. (BACT)</p> <p>Control equipment must control PM emissions by 80% (DBAC Rule)</p>	<p>See "Low-Temp Fabric Filters" section of this table.</p>	<p>CE004, CE044, CE061, and CE062 are fabric filter baghouses, which are generally expected to exceed 80% efficiency when properly operated and maintained.</p>
<p><b>SV024</b> EU057, EU058, EU059, EU066, EU067 (&amp; CE061)</p>	<p>PM &amp; PM<sub>10</sub> emission limits (BACT)</p>	<p>Stack test required, and on recurring schedule based on results.</p>	<p>There are no published emission factors for the operations performed by EU004, EU006, EU057 –EU059, EU066, or EU067.</p> <p>Calculations using AP-42 emission factors for operations similar to EU005 and 99% control show potential PM emissions in excess of the BACT limit.</p> <p>Testing must be conducted to ensure that all limits are met.</p>
<p><b>SV006</b> EU007 &amp; EU008 (&amp; CE045)</p>	<p>Operate and maintain control equipment in order to meet limits. (BACT)</p>	<p>See "Packed Gas Absorption Columns" section of this table.</p>	
<p><b>SV010</b> EU064, EU065, (&amp; CE046)</p>	<p>SO<sub>2</sub>, PM &amp; PM<sub>10</sub> emission limits (BACT)</p>	<p>Stack test required, and on recurring schedule based on results.</p>	<p>No AP-42 emission factors for this type of operation are available.</p> <p>Initial SO<sub>2</sub> performance test for SV006 completed 7/28/98. SV006 PM and PM<sub>10</sub> testing must also be conducted to ensure that all limits are met.</p> <p>Initial performance tests for SV010 completed 1/29/98.</p>



Emission Unit	Requirement (Basis)	Additional Monitoring	Discussion
<p><b>SV007</b> EU009 (&amp; CE006)</p> <p><b>SV009</b> EU015, EU017, EU019, EU020, &amp; EU022 (&amp; CE012)</p> <p><b>SV011</b> EU028 (&amp; CE021)</p>	<p>Operate and maintain control equipment in order to meet limits. (modeling, BACT)</p> <p>Efficiency is assumed to be 20% for PM/PM<sub>10</sub>, 70% for SO<sub>2</sub> and VOC, and 16% for Pb, as applicable.</p>	<p>Read and record pressure drop each day of operation.</p> <p>Read and record water flow rates each day of operation.</p> <p>Read and record pH of scrubbing liquid each day of operation.</p> <p>Keep records of corrective actions taken.</p>	<p>Minimum monitoring requirements for spray towers are listed in MPCA's application forms, and include reading and recording liquid flow rate on a daily basis. MCP also reads and records the pressure drop on the spray towers they use.</p> <p>(Water Flow Rate refers to recirculation flow rate.)</p>
	<p>SV007 PM, PM<sub>10</sub>, and SO<sub>2</sub> emission limits (modeling, synthetic minor limits)</p> <p>SV009 PM, PM<sub>10</sub>, and SO<sub>2</sub> emission limits (modeling)</p> <p>SV011 PM, PM<sub>10</sub>, NO<sub>x</sub>, CO, and SO<sub>2</sub> emission limits (BACT)</p>	<p>Test schedule is based on results of completed stack testing.</p> <p>SV011 (PM, PM<sub>10</sub>, and SO<sub>2</sub>) is to be retested within 6 months of permit issuance, since they are changing the feedstock to this dryer.</p>	<p>SV007 Initial performance tests completed 1/28/98.</p> <p>SV009 stack testing was completed on 1/29/98. Although a new unit has been added since then, calculations show that the new unit does not contribute significantly to the overall emissions. Since the test results were less than 50% of the applicable limit, immediate retesting will not be required; the testing schedule established by the test results can be maintained.</p> <p>SV011 initial performance tests completed 2/5/98.</p>

Emission Unit	Requirement (Basis)	Additional Monitoring	Discussion
<b>SV008</b> EU010, EU011, EU012, & EU013, (& CE011)	Operate and maintain control equipment in order to meet limits. (modeling)	See "Low-Temp Fabric Filters" section of this table.	
<b>SV017</b> EU051 (& CE036)  <b>SV018</b> EU052 (& CE037)  <b>GP001</b> SV025 – SV028, SV031, SV032  EU101, EU102, EU103, EU104, EU105, EU106 (& CE063, CE064, CE065, CE066, CE067, CE068)  <b>SV034</b> EU010, EU011, EU012, EU013, EU024, EU025, EU026, EU027, EU030, EU031 (& CE007, CE008, CE009, CE010, CE017, CE018, CE019, CE020, CE023, CE024)  <b>SV035</b> EU061, EU109 (& CE071)  <b>SV036</b> EU110 (& CE072)  <b>SV037</b> <b>EU111 (&amp; CE073)</b>  <b>SV043</b> EU118 (& CE077)	PM & PM <sub>10</sub> emission limits (modeling)	None, provided control equipment is properly operated.	These are not significant contributors to total PM/PM <sub>10</sub> emissions. PTE based on AP-42 emission factors for some similar operations (there are no emission factors specifically for these operations) are well below the permitted limits.

Emission Unit	Requirement (Basis)	Additional Monitoring	Discussion
<b>SV012</b> EU034 (& CE027)	Operate and maintain control equipment (venturi scrubber) in order to meet limits. (modeling)  Efficiency is assumed to be 90% for PM/PM <sub>10</sub> , 70% for, and 72% for Pb, as applicable.	Read and record pressure drop each day of operation.  Read and record water flow rate each day of operation.  Keep records of corrective actions taken.	Minimum monitoring requirements for venturi scrubbers are listed in MPCA's application forms, and include reading and recording pressure drop and liquid flow rate on a daily basis.  (Water Flow Rates refer to recirculation rates only.)
	PM, PM <sub>10</sub> , CO, NO <sub>x</sub> , and SO <sub>2</sub> emission limits (modeling)	Test schedule is based on results of completed stack testing.	Initial performance tests completed 2/10/98.
<b>SV013</b> EU035 (& CE028), <b>SV014</b> EU036 (& CE029)	Operate and maintain control equipment in order to meet limits. (BACT)  Efficiency is assumed to be 90% for PM/PM <sub>10</sub> , 70% for, and 72% for Pb, as applicable.	Read and record venturi and impingement pressure drops each day of operation.  Read and record water flow rates each day of operation.	Minimum monitoring requirements for venturi and impingement plate scrubbers are listed in MPCA's application forms, and include reading and recording pressure drop and liquid flow rate on a daily basis.  (Water Flow Rates refer to recirculation rates only.)
	Limits on quantity of regenerated carbon per hour (testing limit)	Keep records	Each day, record the total pounds of regenerated carbon processed by each unit. Calculate the hourly rate by dividing by the operating hours (excluding any downtime of 15 minutes or more)
	PM, PM <sub>10</sub> , CO, NO <sub>x</sub> , and SO <sub>2</sub> emission limits (BACT)	Test schedule is based on results of completed stack testing.	Initial performance tests completed 2/5/98 and 2/6/98.

Emission Unit	Requirement (Basis)	Additional Monitoring	Discussion
<b>SV015</b> EU037 – EU048, EU060 (& CE030 and CE031)	Operate and maintain control equipment in order to meet limits. (modeling)	See “Packed Gas Absorption Columns” section of this table.	
	SV033 SO <sub>2</sub> emission limit (modeling)  SV033 SO <sub>2</sub> , PM, and PM <sub>10</sub> emission limits (modeling)	Stack tests required within 365 days of permit issuance, and on recurring schedule based on results.	There are no emission factors for these operations. The only way to determine compliance is through stack testing.
<b>SV016</b> EU049, EU050 (& CE032 – CE035)	Operate and maintain control equipment in order to meet limits. (modeling)	Each day, read and record pressure drop across each baghouse and each cyclone	
	CO and NO <sub>x</sub> emission limits (modeling)	Test schedule is based on results of completed stack testing.	Performance test for NO <sub>x</sub> completed 12/29/98.  Performance test for CO completed 1/28/98.
	PM and PM <sub>10</sub> limits (modeling, synthetic minor)	None	The predicted emissions calculated using AP-42 emission factors and control equipment efficiency are far below the permitted emission rates (approx. 2% - 8% of the limits). Noncompliance is unlikely if the control equipment is properly operated and maintained.
	SO <sub>2</sub> limits (modeling, synthetic minor)	CEM operation	Operation of the SO <sub>2</sub> CEM is required during all periods of operation of the boilers.
	Fuel (coal) usage limit (synthetic minor limit)	Recordkeeping on a 12-month rolling sum	Original limit of 13500 tons per year was revised to 51996 tons per year in 1990 and then to 4133 tons per month in 1992. Coal is not used all the time, only when it is cost effective. Therefore, the limit is being changed back to 51996 tons per year on a 12-month rolling average basis to afford more flexibility.
	Sulfur content of coal (BACT)	Recordkeeping	Records may consist of certification of sulfur content from coal supplier, or results of fuel sampling on each load of

Emission Unit	Requirement (Basis)	Additional Monitoring	Discussion
<b>SV019</b> EU053			coal.
	NO <sub>x</sub> emission limits (modeling, NSPS, BACT)	Continuous Emission Monitoring	The NSPS limit is the most stringent limit. NSPS calls for monitoring, with a 30 day performance test upon request. A NO <sub>x</sub> monitor is in place.
	PM, PM <sub>10</sub> , CO, and SO <sub>2</sub> limits (modeling)	Fuel use limited to natural gas by equipment design. No further monitoring required.	The modeled emission rates of all 4 pollutants (the permit limits) are higher than the PTE based on AP-42 emission factors. Non-compliance is unlikely.
<b>SV020</b> EU054	PM and PM <sub>10</sub> limits (BACT)	Test schedule is based on results of completed stack testing.	Guidelines call for testing every 12 months based on most recent test results for PM <sub>10</sub> . However, PM results call for testing every 36 months. Since PM/PM <sub>10</sub> emissions from natural gas combustion are low, it was decided to use the 36 month schedule rather than put PM and PM <sub>10</sub> testing on different schedules.
	NO <sub>x</sub> emission limits (NSPS, BACT)	Continuous Emission Monitoring  Test schedule is based on results of completed stack testing.	The NSPS limit is the more stringent limit. NSPS calls for monitoring, with a 30 day performance test upon request. A NO <sub>x</sub> monitor is in place.  Stack testing has also been done (1/29/98) to determine compliance for BACT.
	SO <sub>2</sub> limit (BACT)	None	SO <sub>2</sub> is not of significant concern in natural gas combustion. The emission rate used in the modeling analysis (the permit limit) is greater than the PTE based on AP-42 emission factors. Noncompliance is not likely.
	CO limit (BACT)	Test schedule based on results of completed stack testing.	Stack testing was done on 1/29/98.
<b>SV021</b> EU055	Opacity and SO <sub>2</sub> limits (Minn. R. 7011.2300)	None	Unit is a standby generator for emergency use only.
	Operating Limitations (modeling)	Recordkeeping	

Emission Unit	Requirement (Basis)	Additional Monitoring	Discussion
<b>SV022</b> EU056, EU062 (& CE038)	SO <sub>2</sub> , NO <sub>x</sub> , CO limits (modeling)	None	Limits are higher than the PTE based on AP-42, Section 13.5, which also states that testing flares is impractical. Noncompliance is unlikely if the flare is properly operated at all times.  Since the flare is controlling VOC emissions, and VOC emissions are not limited for this facility, monitoring of the flare (other than making sure it's operating) is not required.
<b>SV023</b> EU029  <b>SV029</b> EU068	PM, PM <sub>10</sub> limits (BACT)	Read and record visible emissions 2x per week.  Performance test required within 90 days	No AP-42 emission factors are available, there is no other way to predict compliance with the BACT limit.
<b>SV030</b> EU023 (& CE016), EU119, EU120, EU121, EU122	PM, PM <sub>10</sub> limits (modeling)	Performance test required within 365 days	No directly applicable AP-42 emission factors are available; there is no other way to predict compliance with the modeling limit.
	Operate and maintain CE016 in accordance with Fabric Filter Baghouses section of this table.	None	
<b>SV038</b> EU113  <b>SV039</b> EU114	PM, PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , & CO limits (modeling)	None	Emissions calculated using AP-42 emission factors for similar operations are insignificant, less than 0.5 tpy for all pollutants combined. Limits are based on PTE. Noncompliance is not likely.
<b>SV041</b> EU116	PM, PM <sub>10</sub> limits (modeling)	Read and record visible emissions 2x per week. No testing required.	The expected emissions from this operation are insignificant.
TK001, TK002, TK003, TK005, TK006, TK015	Keep records as described in 40 CFR 60, Subpart Kb.		No requirements apply to the other Tanks.

Emission Unit	Requirement (Basis)	Additional Monitoring	Discussion
<p>Low Temp Fabric Filters (CE004, CE007, CE008, CE009, CE010, CE011, CE017, CE018, CE019, CE020, CE023, CE024, CE036, CE037, CE044, CE062, CE060, CE061, CE063, CE064, CE065, CE066, CE067, CE068, CE071, CE072, CE073, CE077)</p>	<p>Filter equipment is to be operated properly at all times in order to meet emission limits.</p> <p>Control efficiency of 99% is assumed for all fabric filters.</p>	<p>Check the outlet to the atmosphere for VE twice per calendar week. If VE detected, take and record corrective action.</p> <p>If VE check not possible, read and record pressure drop.</p> <p>Keep records of corrective actions taken.</p>	<p>Control equipment rule (Minn. R. 7011.0070) requires monitoring of pressure drop for fabric filter baghouses.</p> <p>It has been MPCA policy to monitor visible emissions (VE) from low temp fabric filters. The logic behind this is that a single tear in a single bag will likely result in VE, but may not cause an excursion of the pressure drop outside of the range. Because of the quantity of baghouses at the facility, MCP's previous permit allowed the twice-per-week frequency as long as no VE are detected. If VE are detected, monitoring must be done daily. In any case, pressure drop gauges must be in place so that pressure drops can be read and recorded in the event that a scheduled VE reading is not possible.</p>
<p>Packed Gas Absorption Columns (CE030, CE031, CE045, CE046, CE069)</p>	<p>Equipment is to be operated properly at all times in order to meet emission limits.</p> <p>Efficiency is assumed to be 90% for PM/PM<sub>10</sub>, 70% for SO<sub>2</sub> and VOC, and 72% for Pb, as applicable.</p>	<p>Read and record pressure drop each day of operation.</p> <p>Read and record water flow rate each day of operation.</p> <p>Read and record pH of scrubbing liquid each day of operation.</p> <p>Keep records of corrective actions taken.</p>	<p>Minimum monitoring requirements for wet scrubbers are listed in MPCA's application forms, and include reading and recording pressure drop and liquid flow rate (recirculation rate) on a daily basis.</p> <p>The permit requires monitoring of pH where SO<sub>2</sub> control is a concern. CE030 and CE031 do not utilize the pH monitoring, because no credit for SO<sub>2</sub> reductions is taken.</p>

### 3.5 Deviations from Delta Guidance

The following two areas are where the permit deviates from the standard Delta listing and ordering procedures. Strictly following the Delta guidance would lengthen the permit by approximately 90 pages.

#### Groups

One item that deviates from guidance is the listing of certain applicable requirements at the group level even though they apply at the individual unit or control device. Specifically: the Minnesota standards for grain elevators and modeling emission limits are listed at GP001. In general, limits that apply to individual pieces of equipment should be tracked at the stack or unit level and should not be listed as a

GP. The main reason is if there is noncompliance with a limit by one unit within the group, the computer system would say the whole group was out of compliance. This is a computer tracking issue.

In this case, the units included in GP001 are identical. They are subject to identical requirements. Testing is not required, so there are no "Delta trackable" requirements associated with any of the units.

### Stack/Vents

In general, requirements specific to control equipment are entered at the "CE" level; requirements specific to emission unit operations are listed at the "EU" level, etc. In this permit, most requirements were listed at the "SV" level, for two main reasons: 1) So that the Permittee can look on one page for all requirements associated with an operation (emission unit operation, control equipment operation, monitor operation, stack emissions), and 2) to shorten the permit. While most requirements are listed under "SV," they are organized as Emission Limits, Stack Parameters, Emission Testing & Monitoring Requirements, Emission Unit Operation, Control Equipment Operation, and Monitor Operating Requirements.

### Appendices

Another area where this permit deviates slightly from Delta guidance is in the use of appendices. While appendices are fully enforceable parts of the permit, in general, any requirement that the MPCA thinks should be tracked (e.g., limits, submittals, etc.), should be in Table A or B, since the appendices are word processing sections and are not part of the tracking system. Violation of the appendices can be enforced, but the computer system will not automatically generate the necessary enforcement notices or documents. These must be generated by staff. For this permit, certain permit requirements and limits are listed in the appendices of the permit instead of Table A.

The first appendix lists the physical stack parameters and emission limits that were modeled for the facility to show that the NAAQS and MAAQS are protected. These include stack heights, stack diameters, and exhaust temperature and exit rates. While these are items that we would like to track, Delta does not at this time provide a means for tracking them. Instead, Table A includes all of the emission rates and a requirement to maintain the stack parameters listed in the Appendix.

The second appendix meets Delta guidance – it is the listing of Insignificant Activities and their applicable requirements. This is a fairly standard way to include these in the permit, since it is highly unlikely the MPCA would need to have these as trackable items in the Delta database.

## **3.6 Confidentiality**

The Permittee has requested to keep certain information about the facility confidential. The MPCA has agreed to keep the following information confidential.

- Manufacturer and model number of most emission units.
- Maximum capacity of emission units, with the exception of units for which the maximum capacity is used to determine rule applicability or to predict compliance with an applicable rule or limit.
- Certain sections of the facility flow diagram which pertain to operations that are unique to the Permittee.

## **4. Conclusion**

Based on the information provided by Minnesota Corn Processors, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 08300038-001 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: Toni Volkmeier, Glenn Giefer, Yolanda Hernandez, Dennis Becker

Attachments: Attachment A: Modeling Results



Attachment B: Emission Calculations, Summary, and Emission Limit History  
Attachment C: Facility Description Forms & CD-01  
Attachment D: Insignificant Activities