

**AIR EMISSION PERMIT NO. 08300038- 008**  
**Major Amendment**

**IS ISSUED TO**

Archer Daniels Midland Company

**ADM CORN PROCESSING - MARSHALL**

400 Erie Road West  
Marshall, Lyon County, Minnesota 56258

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

This permit authorizes the Permittee to operate and modify the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit. Unless otherwise indicated, all the Minnesota Rules cited as the origin of the permit terms are incorporated into the State Implementation Plan under 40 CFR § 52.1220 and as such are enforceable by the U.S. Environmental Protection Agency Administrator or citizens under the Clean Air Act.

**Permit Type:** Federal; Pt 70/Incorporates Existing NSR Conditions

**Issue Date:** August 8, 2000

**Authorization to Construct and Operate (40 CFR 52.21) Issuance Date:** November 14, 2008

**Major Amendment Issuance Date:** June 15, 2009

**Expiration:** August 8, 2005

All Title I Conditions do not expire. The Permittee can continue to operate this facility after the expiration date of the permit as provided by Minn. R. 7007.0450, subp. 3 (Title V Reissuance application received February 9, 2005).

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Don Smith, P.E., Manager  
Air Quality Permit Section  
Industrial Division

for Paul Eger  
Temporary Commissioner  
Minnesota Pollution Control Agency

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### AMENDMENT SUMMARY:

Permit Type	Action Number	Application Date	Issuance Date
Total Facility Operating Permit	001	01/17/1995	08/08/2000
Major Amendment	002	01/16/2001	08/16/2001
Major Amendment	003	08/27/2001	04/11/2002
Major Amendment	004	04/15/2002	06/17/2002
Administrative Amendment	005	10/28/2002	12/13/2002
Major Amendment	006	11/06/2002	11/07/2003
Major Amendment	007	10/12/2004	05/15/2006
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**NOTICE TO THE PERMITTEE:**

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

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

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

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

**PERMIT SHIELD:**

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

**FACILITY DESCRIPTION:**

Archer Daniels Midland (ADM) Corn Processing - Marshall 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 ADM Corn Processing - Marshall 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.

**Permit Action 008 (Major Amendment):**

Permit Action 008 incorporates a minor amendment (installation of a venturi scrubber and installation of a thermal oxidizer on Carbon Furnace No. 1); changes to Particulate Matter smaller than 10 microns limits on SV007, SV010, and SV030, to lower limits than the previous permits; and installation of a new gluten dryer (EU127).

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall  
 Permit Number: 08300038 - 008

**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
The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subps. 7A, 7L & 7M; Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080.
A.1 PARAMETERS USED IN NAAQS MODELING	hdr
Parameters Used in NAAQS Modeling: The emission rates, 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 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 based on the data in Appendix I. 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 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. DETERMINING IF A PROJECT/MODIFICATION IS SUBJECT TO NEW SOURCE REVIEW	hdr
These requirements apply where there is a reasonable possibility that a proposed project, analyzed using the actual-to-projected-actual (ATPA) test and found to not be part of a major modification, may result in a significant emissions increase. If the ATPA test is not used for a particular project, or if there is not a reasonable possibility that the proposed project could result in a significant emissions increase, then these requirements do not apply to that project.  Even though a particular modification is not subject to New Source Review, a permit amendment, recordkeeping, or notification may still be required under Minn. R. 7007.1150 - 7007.1500.	Title I Condition: 40 CFR Section 52.21(r)(6) and Minn. R. 7007.3000

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall  
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<p>Preconstruction Documentation -- Before beginning actual construction on a project, the Permittee shall document the following information:</p> <ol style="list-style-type: none"> <li>1. A description of the project</li> <li>2. Identification of the emission unit(s) whose emissions of an NSR pollutant could be affected</li> <li>3. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the potential emissions, the projected actual emissions, the amount of emissions excluded due to increases not associated with the modification and that the unit(s) could have accommodated during the baseline period, an explanation of why the amounts were excluded, and any creditable contemporaneous increases and decreases that were considered in the determination.</li> </ol> <p>The Permittee shall maintain records of this documentation.</p>	<p>Title I Condition: 40 CFR Section 52.21(r)(6) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 &amp; 5</p>
<p>The Permittee shall monitor the actual emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using the ATPA test, and the potential emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using potential emissions. The Permittee shall calculate and maintain a record of the sum of the actual and potential (if used in the analysis) emissions of the regulated pollutant, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit of any unit associated with the project.</p>	<p>Title I Condition: 40 CFR Section 52.21(r)(6) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 &amp; 5</p>
<p>The Permittee must submit a report to the Agency if the annual summed (actual plus potential, if applicable) emissions differ from the preconstruction projection and exceed the baseline actual emissions by a significant amount as listed at 40 CFR Section 52.21(b)(23). Such report shall be submitted to the Agency within 60 days after the end of the year in which the exceedances occur. The report shall contain:</p> <ol style="list-style-type: none"> <li>a. The name and ID number of the facility, and the name and telephone number of the facility contact person</li> <li>b. The annual emissions (actual plus potential, if any part of the project was analyzed using potential emissions) for each pollutant for which the preconstruction projection and significant emissions increase are exceeded.</li> <li>c. Any other information, such as an explanation as to why the summed emissions differ from the preconstruction projection.</li> </ol>	<p>Title I Condition: 40 CFR Section 52.21(r)(6) and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 4 &amp; 5</p>
<p><b>C. GENERAL REQUIREMENTS</b></p>	<p>hdr</p>
<p>Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O &amp; M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.</p>	<p>Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)</p>
<p>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.</p>	<p>Title I Condition: Monitoring for 40 CFR Section 52.21 (j) or (k)</p>
<p>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, whichever is more frequent, and maintain a written record of the inspection and any action resulting from the inspection.</p>	<p>Minn. R. 7007.0800, subp. 2 and subp. 14</p>
<p>Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A and/or B.</p>	<p>Minn. R. ch. 7017</p>
<p>Performance Test Notifications and Submittals;</p> <p>Performance Test Notification (written): due 30 days before each Performance Test              Performance Test Plan: due 30 days before each Performance Test              Performance Test Pre-Test Meeting: due 7 day before each Performance Test              Performance Test Report: due 45 days after each Performance Test              Performance Test Report - Microfiche Copy or CD: due 105 day after each Performance Test.</p> <p>The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.</p>	<p>Minn. R. 7017.2030, subp. 1, subp. 1-4 and Minn. R. 7017.2035, subp. 1-2</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

<p>Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change.</p> <p>Limits set as a result of a performance test may include production limits, material feed rates to individual units, operating parameters and parameters related to the operation of air pollution control equipment such temperature, scrubber water flowrate and filter pressure drop.</p>	<p>Minn. R. 7017.2025</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 and/or B, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.</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. 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>
<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>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

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<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>When the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. For expiring permits, these records shall be kept for a period of five years from the date the change was made or until permit reissuance, whichever is longer. For nonexpiring permits, these records shall be kept for a period of five years from the date that the change was made. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format.</p>	<p>Minn. R. 7007.1200, subp. 4</p>
<p>Recordkeeping: Retain all records at the stationary source or at the off-site storage facility located 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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.070 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 0.070 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 0.10 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.  If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

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

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

FS 004 Coal Pile & Coal transfer operations

<b>What to do</b>	<b>Why to do it</b>
Do not cause or permit the transporting of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. 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.	Minn. R. 7011.0150

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.0090 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 Equipment List submittal (see Table B).	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 most recently submitted Equipment List (see Table B). 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 0.10 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

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

A-8

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

<p>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.</p> <p>If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.</p>	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit
<p>Recordkeeping of Corrective Actions: If visible emissions are observed, or if the recorded pressure drop (1-hour average) 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>	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k) limit

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 total particulate matter 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
Performance Test: due before end of each 60 months starting 01/31/2003 to measure 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
Doors shall be installed on the entry and exit of each truck unloading bay within 270 days after issuance of permit action 008. The doors for a truck unloading bay shall be closed during truck unloading in that bay.	Minn. R. ch. 7009
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 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 Equipment List submittal (see Table B).	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 most recently submitted Equipment List (see Table B). 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)]

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

A-10

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

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 0.10 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.  If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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)
Performance Test: due before end of each 60 months starting 09/26/2005 to measure total particulate matter at the stack. The first test is due September 26, 2005, 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 and Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 09/26/2005 to measure PM10 emissions at the stack. The first test is due September 26, 2005, 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 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 Equipment List Submittal (see Table B).	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 most recently submitted Equipment List (see Table B). 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)
Process Throughput: less than or equal to 834 tons/hour using 24-hour Block Average of corn, based on a 56 pound bushel. This is equivalent to 30,107 bushels per hour. Downtime of 15 minutes or more is not to be counted as operating time.	Minn. R. 7017.2025
Recordkeeping of Throughput: Each day, calculate the amount of corn processed for the previous day, in bushels per hour. Divide the total amount of corn 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 (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)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

<p>Total Particulate Matter: greater than or equal to 99 percent control efficiency</p>	<p>Title I Condition: Control required for 40 CFR Section 52.21(j) [Also meets the requirements of Minn. R. 7011.1005, subp. 3(E)]</p>
<p>Particulate Matter &lt; 10 micron: greater than or equal to 99 percent control efficiency</p>	<p>Title I Condition: Control required for 40 CFR Section 52.21(j) &amp; (k)</p>
<p>Pressure Drop: greater than or equal to 0.10 inches of water column and less than or equal to 10.0 inches of water column</p>	<p>Title I Condition: Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
<p>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.</p> <p>If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
<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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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)
Performance Test: due before end of each 60 months starting 09/26/2005 to measure total particulate matter emissions at the stack. The first test is due September 26, 2005, 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 and Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 09/26/2005 to measure PM10 emissions at the stack. The first test is due September 26, 2005, 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 and Minn. R. 7017.2020, subp. 1
C. EMISSION UNIT OPERATION (EU005)	hdr
Process Throughput: less than or equal to 630.7 tons/hour using 24-hour Block Average of corn, based on a 56 pound bushel. This is equivalent to 22,524 bushels per hour. Downtime of 15 minutes or more is not to be counted as operating time.	Minn. R. 7017.2025
Recordkeeping of Throughput: Each day, calculate the amount of corn processed for the previous day, in bushels per hour. Divide the total amount of corn 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 (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 0.10 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.  If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.060 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 0.060 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)
Performance Test: due before end of each 60 months starting 09/26/2005 to measure total particulate matter emissions at the stack. The first test is due September 26, 2005, 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 and Minn. R. Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 09/26/2005 to measure PM10 emissions at the stack. The first test is due September 26, 2005, 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 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)
Process Throughput: less than or equal to 48950 bushel/hour using 24-hour Block Average of corn fines. Downtime of 15 minutes or more is not to be counted as operating time.	Minn. R. 7017.2025
Recordkeeping of Throughput: Each day, calculate the amount of corn fines processed for the previous day, in bushels per hour. Divide the total amount of corn fines 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 (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 0.10 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.  If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

**A-15**

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 6.0 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 0.30 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 6.0 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
Performance Test: due before end of each 60 months starting 09/26/2005 to measure total particulate matter emissions at the stack. The first test is due September 26, 2005, 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 and (1&2) Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 09/26/2005 to measure PM10 emissions at the stack. The first test is due September 26, 2005, 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 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 Equipment List submittal (see Table B).	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 most recently submitted Equipment List (see Table B). 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 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 (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)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

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 0.50 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)
pH of scrubbing liquid: greater 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.  If the pressure drop is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	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.  If the Water Flow Rate is not within the specified range, the Permittee may compute a 1-hour average Flow Rate from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	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.  If the pH is not equal to or above the specified minimum, the Permittee may compute a 1-hour average pH from data records including the observation outside the specified range, to determine if the 1-hour average is equal to or above the specified minimum. The 1-hour average must consist of at least 4 records. If the 1-hour average is not equal to or above the specified minimum, perform corrective actions.	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

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 0.040 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 3.0 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 0.0090 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 total particulate matter 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
Performance Test: due before end of each 60 months starting 01/31/2003 to measure 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) 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
Performance Test: due before end of each 60 months starting 01/31/2003 to measure 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)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

A-19

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

<p>Recordkeeping of Pressure Drop: Once each operating day, read and record pressure drop.</p> <p>If the pressure drop is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)</p>
<p>Recordkeeping of Water Flow Rate: Once each operating day, read and record the water flow rate.</p> <p>If the Water Flow Rate is not within the specified range, the Permittee may compute a 1-hour average Flow Rate from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)</p>
<p>Recordkeeping of Scrubber Water pH: Once each operating day, read and record the scrubber water pH.</p> <p>If the pH is not within the specified range, the Permittee may compute a 1-hour average pH from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)</p>
<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 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.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.30 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 0.10 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.  If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.30 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
Volatile Organic Compounds: less than or equal to 6.6 lbs/hour measured as total mass of VOC.	Consent Decree Para. 39
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Performance Test: due before end of each 36 months starting 10/31/2006 to measure VOC emissions from the stack. The first test is due October 31, 2009, then every 36 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 01/31/2003 to measure total particulate matter 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
Performance Test: due before end of each 60 months starting 01/31/2003 to measure 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) 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
Performance Test: due before end of each 60 months starting 01/31/2003 to measure 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)



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

<p>Pressure Drop: greater than or equal to 0.50 inches of water column and less than or equal to 6.0 inches of water column</p>	<p>Title I Condition: Monitoring for 40 CFR Section 52.21(k)</p>
<p>Water flow rate: greater than or equal to 800 gallons/minute and less than or equal to 1400 gallons/minute</p>	<p>Title I Condition: Monitoring for 40 CFR Section 52.21(k)</p>
<p>Scrubber water pH: greater than or equal to 6.0 and less than or equal to 8.0</p>	<p>Title I Condition: Monitoring for 40 CFR Section 52.21(k)</p>
<p>Recordkeeping of Pressure Drop: Once each operating day, read and record pressure drop.  If the pressure drop is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)</p>
<p>Recordkeeping of Water Flow Rate: Once each operating day, read and record the water flow rate.  If the Water Flow Rate is not within the specified range, the Permittee may compute a 1-hour average Flow Rate from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)</p>
<p>Recordkeeping of scrubber water pH: Once each operating day, read and record the scrubber water pH.  If the pH is not within the specified range, the Permittee may compute a 1-hour average pH from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)</p>
<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 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.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 6.0 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 0.30 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 4.5 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 0.014 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 total particulate matter 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
Performance Test: due before end of each 60 months starting 01/31/2003 to measure 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&3) Title I Condition: Testing for 40 CFR Section 52.21(j) and (k) limits (1-3) Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 01/31/2003 to measure 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 Equipment List submittal (see Table B).	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 most recently submitted Equipment List (see Table B). 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)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

<p>Particulate Matter &lt; 10 micron: greater than or equal to 90 percent control efficiency</p>	<p>Title I Condition: Control required for 40 CFR Section 52.21(j) &amp; (k)</p>
<p>Sulfur Dioxide: greater than or equal to 70 percent control efficiency</p>	<p>Title I Condition: Control required for 40 CFR Section 52.21(j) &amp; (k)</p>
<p>Pressure Drop: greater than or equal to 0.50 inches of water column and less than or equal to 8.0 inches of water column</p>	<p>Title I Condition: Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
<p>Water flow rate: greater than or equal to 600 gallons/minute and less than or equal to 850 gallons/minute</p>	<p>Title I Condition: Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
<p>pH of scrubbing liquid: greater than or equal to 8.0</p>	<p>Title I Condition: Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
<p>Recordkeeping of Pressure Drop: Once each operating day, read and record pressure drop.  If the pressure drop is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
<p>Recordkeeping of Water Flow Rate: Once each operating day, read and record the water flow rate.  If the Water Flow Rate is not within the specified range, the Permittee may compute a 1-hour average Flow Rate from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
<p>Recordkeeping of Scrubber Water pH: Once each operating day, read and record the pH.  If the pH is not equal to or above the specified minimum, the Permittee may compute a 1-hour average pH from data records including the observation outside the specified range, to determine if the 1-hour average is equal to or above the specified minimum. The 1-hour average must consist of at least 4 records. If the 1-hour average is not equal to or above the specified minimum, perform corrective actions.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
<p>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.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**Subject Item: SV 011 Gluten Dryer (CE021)**

**Associated Items:** EU 028 Gluten Dryer #1

EU 127 Gluten Dryer #2

What to do	Why to do it
<p>Installation of Gluten Dryer #2 (EU127): Starting not later than 180 days after the startup of EU123, only one of these dryers may be in operation at any time, other than times when one dryer is being shutdown and the other started.</p> <p>On a trial basis, Mechanical Recompression vent gases may be vented to the gluten dryer #2 burner for VOC destruction when gluten dryer #2 is operating; otherwise they may be vented to the RTO for carbon furnace #1 or the feedhouse scrubber. Testing for VOC emission/destruction efficiency will determine if this can be used to meet Consent Decree requirements.</p>	<p>Title I Condition: 40 CFR Section 52.21; Minn. R. 7007.3000</p>
<p>A.1. EMISSION LIMITS - GLUTEN DRYER # 2 (EU 127)</p>	<p>hdr</p>
<p>Total Particulate Matter: less than or equal to 3.31 lbs/hour using 3-hour Block Average not including boiler flue gas</p>	<p>Title I Condition: to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>Particulate Matter &lt; 10 micron: less than or equal to 3.31 lbs/hour using 3-hour Block Average not including boiler flue gas</p>	<p>Title I Condition: to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>Sulfur Dioxide: less than or equal to 8.9 lbs/hour using 3-hour Average not including boiler flue gas</p>	<p>Title I Condition: to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>Nitrogen Oxides: less than or equal to 8.9 lbs/hour using 3-hour Block Average not including boiler flue gas</p>	<p>Title I Condition: to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>Carbon Monoxide: less than or equal to 22.4 lbs/hour using 3-hour Average not including boiler flue gas</p>	<p>Title I Condition: to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>Volatile Organic Compounds: less than or equal to 8.9 lbs/hour as total mass of VOC, not including boiler flue gas</p>	<p>Title I Condition: to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000</p>
<p>A.2. EMISSION LIMITS - GLUTEN DRYER # 1 (EU 028)</p>	<p>hdr</p>
<p>Total Particulate Matter: less than or equal to 17.5 lbs/hour using 24-hour Block Average</p>	<p>Title I Condition: 40 CFR Section 52.21(j) (BACT limit); Minn. R. 7007.3000</p>
<p>Total Particulate Matter: less than or equal to 0.30 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.</p>	<p>Minn. R. 7011.0610, subp. 1(A)(1)</p>
<p>Particulate Matter &lt; 10 micron: less than or equal to 0.019 grains/actual cubic foot</p>	<p>Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000</p>
<p>Particulate Matter &lt; 10 micron: less than or equal to 17.5 lbs/hour using 24-hour Block Average</p>	<p>Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000</p>
<p>Opacity: less than or equal to 20 percent opacity , except for one six-minute period per hour of not more than 60 percent opacity.</p>	<p>Minn. R. 7011.0610, subp. 1(A)(2)</p>
<p>Sulfur Dioxide: less than or equal to 15.0 lbs/hour using 1-Hour Average . This limit applies until the construction of the biogas project is complete (Permit Action 007).</p>	<p>Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000</p>
<p>Sulfur Dioxide: less than or equal to 11.0 lbs/hour using 3-hour Average . This limit applies after construction of the biogas project is complete (Permit Action 007).</p>	<p>Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000</p>
<p>Nitrogen Oxides: less than or equal to 3.07 lbs/hour using an annual average</p>	<p>Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000</p>
<p>Carbon Monoxide: less than or equal to 90.06 lbs/hour using 1-Hour Average . This limit applies until the construction of the biogas project is complete (Permit Action 007).</p>	<p>Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000</p>
<p>Carbon Monoxide: less than or equal to 3.9 lbs/hour using 3-hour Average . This limit applies after the construction of the biogas project is complete (Permit Action 007).</p>	<p>Title I Condition: 40 CFR Section 52.21(j) (BACT limit); 40 CFR Section 52.21(k); Minn. R. 7007.3000</p>
<p>B. EMISSION TESTING AND MONITORING REQUIREMENTS</p>	<p>hdr</p>
<p>Initial Performance Test: due 90 days after Initial Startup of EU127 to measure total particulate matter emission</p>	<p>Title I Condition: Testing for 40 CFR Section 52.21(j) &amp; (k) limits Minn. R. 7017.2020, subp. 1</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall  
 Permit Number: 08300038 - 008

Initial Performance Test: due 90 days after Initial Startup of EU127 to measure PM10 emission	Title I Condition: Testing for 40 CFR Section 52.21(j) & (k) limits Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 90 days after Initial Startup of EU127 to measure SO2 emission	Title I Condition: Testing for 40 CFR Section 52.21(j) & (k) limits Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 90 days after Initial Startup of EU127 to measure NOx emission	Title I Condition: Testing for 40 CFR Section 52.21(j) & (k) limits Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 90 days after Initial Startup of EU127 to measure CO emission	Title I Condition: Testing for 40 CFR Section 52.21(j) & (k) limits Minn. R. 7017.2020, subp. 1
Initial Performance Test: due 90 days after Initial Startup of EU127 to measure VOC emission	Title I Condition: Testing for 40 CFR Section 52.21(j) & (k) limits Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 36 months starting 09/02/2002 to measure CO emissions at the stack for EU 028. Initial performance testing was completed on 9/02/02.  Once EU127 is in full operation, then performance testing on EU028 is not required unless it is operated > 1500 hours per calendar year.  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 before end of each 36 months starting on 09/02/2002 to measure NOx emissions at the stack for EU 028. Initial performance testing was completed on 9/02/02.  Once EU127 is in full operation, then performance testing on EU028 is not required unless it is operated > 1500 hours per calendar year.  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
C. EMISSION UNIT OPERATION (EU028)	hdr
Fuel Use (EU028 and EU127): Limited to pipeline quality natural gas and anaerobic digester biogas generated by the facility's wastewater treatment system.	Title I Condition: 40 CFR Section 52.21(j) (BACT for NOX, CO)
Process Throughput: less than or equal to 30910 lbs/hour using 30-day Rolling Average of dried gluten. Applies to EU028 only.  Downtime of 15 minutes or more is not to be counted as operating time.	Minn. R. 7017.2025
Recordkeeping of Throughput: Each day, calculate the amount of gluten loaded into railcars for the previous day and for the previous 30-day period. Divide the total amount of gluten loaded for the previous 30-day period by the hours of operating time during the previous 30-day period. Do not count downtime of 15 minutes or more as operating time. Applies to EU028 only.	Minn. R. 7007.0800, subp. 5
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 90 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)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

<p>Recordkeeping of Pressure Drop: Once each operating day, read and record pressure drop.</p> <p>If the pressure drop is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
<p>Recordkeeping of Water Flow Rate: Once each operating day, read and record the water flow rate.</p> <p>If the Water Flow Rate is not within the specified range, the Permittee may compute a 1-hour average Flow Rate from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
<p>Recordkeeping of Scrubber Water pH: Once each operating day, read and record the pH.</p> <p>If the pH is not within the specified range, the Permittee may compute a 1-hour average pH from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) &amp; (k)</p>
<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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.50 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 0.30 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 0.50 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 2.67 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 22.3 lbs/hour using 1-Hour Average after startup of CE083	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Volatile Organic Compounds: less than or equal to 1.96 lbs/hour or less than 10 ppm, as total mass of VOC, after startup of CE083	Title I Condition: 40 CFR Section 52.21(j); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 04/22/2008 to measure PM emissions at the stack.  For additional applicable performance test requirements, see 'General Performance Test Requirements' in Table A, Subject Item "Total Facility".	Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 04/22/2008 to measure VOC emissions at the stack.  For additional applicable performance test requirements, see 'General Performance Test Requirements' in Table A, Subject Item "Total Facility".	Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 04/22/2008 to measure CO 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; Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 02/28/2003 to measure NOx 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 60 months starting 02/28/2003 to measure 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 01/09/2004 to measure PM10 emissions at the stack. The first test is due January 9, 2004, 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	hdr
Process Throughput: less than or equal to 1069.7 lbs/hour using 24-hour Block Average of regenerated carbon. Downtime of 15 minutes or more is not to be counted as operating time.	Minn. R. 7017.2025, subp. 3

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

D.1. CONTROL EQUIPMENT OPERATION (CE027 - 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(k) (use of control equipment required to meet modeling limit)
Pressure Drop: greater than or equal to 1.0 inches of water column and less than or equal to 15 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Water flow rate: greater than or equal to 40 gallons/minute and less than or equal to 120 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.  If the pressure drop is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	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.  If the Water Flow Rate is not within the specified range, the Permittee may compute a 1-hour average Flow Rate from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	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)
The Permittee shall operate and maintain the venturi scrubber in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
D.2. CONTROL EQUIPMENT OPERATION (CE084 - 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)
Total Particulate Matter: greater than or equal to 90 percent control efficiency	Minn. R. 7011.0070, subp. 1
Pressure Drop: greater than or equal to 2.0 inches of water column	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Water flow rate: greater than or equal to 10 gallons/minute and less than or equal to 25 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.  If the pressure drop is not equal to or above the specified minimum, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is equal to or above the specified minimum. The 1-hour average must consist of at least 4 records. If the 1-hour average is not equal to or above the specified minimum, perform corrective actions.	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.  If the Water Flow Rate is not within the specified range, the Permittee may compute a 1-hour average Flow Rate from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	DUPLICATE (2) 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 CE084 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.	DUPLICATE (4) Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
The Permittee shall operate and maintain the venturi scrubber in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

D.3. CONTROL EQUIPMENT OPERATION (CE083 - afterburner)	hdr
Volatile Organic Compounds: greater than or equal to 95 percent control efficiency or less than or equal to 10 ppmvd VOC	Title I Condition: BACT-equivalent emission limit pursuant to consent decree entered into under 40 CFR Sec. 52.21
Carbon Monoxide: greater than 90 percent control efficiency or less than or equal to 100 ppmvd	Title I Condition: BACT-equivalent emission limit pursuant to consent decree entered into under 40 CFR Sec. 52.21
Temperature: greater than or equal to 1430 degrees F as a three-hour block average at the Combustion Chamber outlet, unless a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new minimum shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The new minimum is final upon issuance of a permit amendment incorporating the change. If the 3-hour block average temperature is below the minimum temperature limit, the VOC emitted during that time shall be considered uncontrolled until the temperature is above the minimum temperature limit. This shall be reported as a deviation.	Title I Condition: BACT-equivalent emission limit pursuant to consent decree entered into under 40 CFR Sec. 52.21 Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall operate and maintain the thermal oxidizer any time that any process equipment controlled by the thermal oxidizer is in operation. The Permittee shall document periods of non-operation of the control equipment.	Title I Condition: BACT-equivalent emission limit pursuant to consent decree entered into under 40 CFR Sec. 52.21 Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall maintain a continuous hard copy readout or computer disk file of the temperature readings and calculated three hour block average temperatures for the combustion chamber.	Title I Condition: BACT-equivalent emission limit pursuant to consent decree entered into under 40 CFR Sec. 52.21 Minn. R. 7007.0800, subp. 4 and 5
Monitoring Equipment: The Permittee shall install and maintain thermocouples to conduct temperature monitoring required by this permit. The monitoring equipment must be installed, in use, and properly maintained whenever operation of the monitored control equipment is required.	Title I Condition: BACT-equivalent emission limit pursuant to consent decree entered into under 40 CFR Sec. 52.21 Minn. R. 7007.0800, subp. 4
Daily Monitoring: The Permittee shall physically verify the operation of the temperature recording device at least once each operating day to verify that it is working and recording properly.	Minn. R. 7007.0800, subp. 4 and 5
The Permittee shall maintain a written record of the daily verifications.	
The Permittee shall maintain and operate a thermocouple monitoring device that continuously indicates and records the combustion chamber temperature of the thermal oxidizer. The monitoring device shall have a margin of error less than the greater of +/- 0.75 percent of the temperature being measured or +/- 2.5 degrees Celsius. The recording device shall also calculate the three-hour block average combustion chamber temperature.	Minn. R. 7007.0800, subp. 4 and 5
Inspections: At least once every 18 months, or as recommended by the manufacturer, the Permittee shall inspect the control equipment internal and external system components, including but not limited to the refractory, heat exchanger, and electrical systems. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subp. 4, 5, and 14
Annual Calibration: The Permittee shall calibrate the temperature monitor at least once every 18 months and shall maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subp. 4, 5, and 14
For periods when the thermal oxidizer is operated above the minimum combustion chamber temperature, the Permittee shall use either one of the following when completing calculations as required elsewhere in this permit: a. The overall control efficiency limit specified in this permit for this equipment (95%); or b. The overall control efficiency determined during the most recent MPCA approved performance test. If the tested efficiency is less than the efficiency limit in this permit, the Permittee must use the tested value in all calculations until the efficiency is demonstrated to be above the permit limit through a new test.	Minn. R. 7007.0800, subp. 4 and 5
Corrective Actions: If the temperature is below the minimum specified by this permit or if the thermal oxidizer or any of its components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall return the temperature to at least the permitted minimum and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the thermal oxidizer. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subp. 4, 5, and 14
The Permittee shall operate and maintain the thermal oxidizer in accordance with the Operation and Maintenance (O & M) Plan for CE083. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall  
 Permit Number: 08300038 - 008

**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 0.70 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 0.30 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 0.70 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 0.0070 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 2.0 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 3.38 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
Volatile Organic Compounds: less than or equal to 7.6 lbs/hour measured as total mass of VOC.	Consent Decree para. 39
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Performance Test: due before end of each year starting 01/30/2008 to measure VOC emissions at the stack. The first test is due on or before January 30, 2009, then every 12 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 03/01/2006 to measure total particulate matter emissions at the stack. The first test is due on or before March 1, 2006, 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
Performance Test: due before end of each 60 months starting 03/01/2006 to measure PM10 emissions. The first test is due on or before March 1, 2006, 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
Performance Test: due before end of each 60 months starting 03/01/2006 to measure SO2 emissions at the stack. The first test is due on or before March 1, 2006, 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
Performance Test: due before end of each 60 months starting 03/01/2006 to measure NOx emissions at the stack. The first test is due on or before March 1, 2006, 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
Performance Test: due before end of each 36 months starting 03/01/2004 to measure CO emissions at the stack. The first test is due on or before March 1, 2004, then every 36 months thereafter.  The test due in calendar year 2007 shall be conducted by June 30, 2007.  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

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

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 1449.2 lbs/hour using 24-hour Block Average of regenerated carbon. Downtime of 15 minutes or more is not to be counted as operating time.	Minn. R. 7017.2025, subp. 3
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 15.0 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.  If the pressure drop is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	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.  If the water flow rate is not within the specified range, the Permittee may compute a 1-hour average water flow rate from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
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.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
E. CONTROL EQUIPMENT OPERATION (CE081 - afterburner)	hdr
Temperature: greater than or equal to 1400 degrees F as a three-hour block average at the Combustion Chamber outlet, unless a new limit is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new limit shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The limit is final upon issuance of a permit amendment incorporating the change. If the 3-hour block average temperature is below the minimum temperature limit, the VOC used during that time shall be considered uncontrolled until the temperature is above the minimum temperature limit. This shall be reported as a deviation.	Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall operate and maintain the thermal oxidizer any time that any process equipment controlled by the thermal oxidizer is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall maintain a continuous hard copy readout or computer disk file of the temperature readings and calculated three hour block average temperatures for the combustion chamber.	Minn. R. 7007.0800, subp. 4 and 5
Daily Monitoring: The Permittee shall physically verify the operation of the temperature recording device at least once each operating day to verify that it is working and recording properly.  The Permittee shall maintain a written record of the daily verifications.	Minn. R. 7007.0800, subp. 4 and 5
Monitoring Equipment: The Permittee shall install and maintain thermocouples to conduct temperature monitoring required by this permit. The monitoring equipment must be installed, in use, and properly maintained whenever operation of the monitored control equipment is required.	Minn. R. 7007.0800, subp. 4

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

The Permittee shall maintain and operate a thermocouple monitoring device that continuously indicates and records the combustion chamber temperature of the thermal oxidizer. The monitoring device shall have a margin of error less than the greater of +/- 0.75 percent of the temperature being measured or +/- 2.5 degrees Celsius. The recording device shall also calculate the three-hour block average combustion chamber temperature.	Minn. R. 7007.0800, subp. 4 and 5
Inspections: At least once every 18 months, or as recommended by the manufacturer, the Permittee shall inspect the control equipment internal and external system components, including but not limited to the refractory, heat exchanger, and electrical systems. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subp. 4, 5, and 14
Annual Calibration: The Permittee shall calibrate the temperature monitor at least once every 18 months and shall maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subp. 4, 5, and 14
For periods when the thermal oxidizer is operated above the minimum combustion chamber temperature, the Permittee shall use either one of the following when completing calculations as required elsewhere in this permit: a. The overall control efficiency limit specified in this permit for this equipment (95%); or b. The overall control efficiency determined during the most recent MPCA approved performance test. If the tested efficiency is less than the efficiency limit in this permit, the Permittee must use the tested value in all calculations until the efficiency is demonstrated to be above the permit limit through a new test.	Minn. R. 7007.0800, subp. 4 and 5
Corrective Actions: If the temperature is below the minimum specified by this permit or if the thermal oxidizer or any of its components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall return the temperature to at least the permitted minimum and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the thermal oxidizer. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subp. 4, 5, and 14
The Permittee shall operate and maintain the thermal oxidizer in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.70 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 0.30 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 0.70 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
Volatile Organic Compounds: less than or equal to 7.6 lbs/hour measured as total mass of VOC.	Consent Decree para. 39
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 2.0 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 3.38 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
Volatile Organic Compounds: less than or equal to 7.6 lbs/hour measured as total mass of VOC.	Minn. R. 7007.0200 and Consent Decree para. 39
B. EMISSION TESTING AND MONITORING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 10/10/2006 to measure VOC emissions at the stack. The first test is due October 10, 2011, then every 60 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 01/11/2006 to measure SO2 emissions at the stack. The first test is due January 11, 2006, 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
Performance Test: due before end of each 60 months starting 01/11/2006 to measure NOx emissions at the stack. The first test is due January 11, 2006, 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
Performance Test: due before end of each 60 months starting 01/11/2006 to measure CO emissions at the stack. The first test is due January 11, 2006, 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
Performance Test: due before end of each 60 months starting 01/11/2006 to measure total particulate matter emissions at the stack. The first test is due January 11, 2006, 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
Performance Test: due before end of each 60 months starting 01/11/2006 to measure PM10 emissions at the stack. The first test is due January 11, 2006, 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

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

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 1705.7 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 15.0 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.  If the pressure drop is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	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.  If the water flow rate is not within the specified range, the Permittee may compute a 1-hour average water flow rate from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
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.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(j) & (k)
E. CONTROL EQUIPMENT OPERATION (CE082 - afterburner)	hdr
Temperature: greater than or equal to 1400 degrees F as a three-hour block average at the Combustion Chamber outlet, unless a new limit is set pursuant to Minn. R. 7017.2025, subp. 3 based on the values recorded during the most recent MPCA-approved performance test where compliance was demonstrated. The new limit shall be implemented upon receipt of the Notice of Compliance letter granting preliminary approval. The limit is final upon issuance of a permit amendment incorporating the change. If the 3-hour block average temperature is below the minimum temperature limit, the VOC used during that time shall be considered uncontrolled until the temperature is above the minimum temperature limit. This shall be reported as a deviation.	Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall operate and maintain the thermal oxidizer any time that any process equipment controlled by the thermal oxidizer is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subp. 2 and 14
The Permittee shall maintain a continuous hard copy readout or computer disk file of the temperature readings and calculated three hour block average temperatures for the combustion chamber.	Minn. R. 7007.0800, subp. 4 and 5
Daily Monitoring: The Permittee shall physically verify the operation of the temperature recording device at least once each operating day to verify that it is working and recording properly.  The Permittee shall maintain a written record of the daily verifications.	Minn. R. 7007.0800, subp. 4 and 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

Monitoring Equipment: The Permittee shall install and maintain thermocouples to conduct temperature monitoring required by this permit. The monitoring equipment must be installed, in use, and properly maintained whenever operation of the monitored control equipment is required.	Minn. R. 7007.0800, subp. 4
The Permittee shall maintain and operate a thermocouple monitoring device that continuously indicates and records the combustion chamber temperature of the thermal oxidizer. The monitoring device shall have a margin of error less than the greater of +/- 0.75 percent of the temperature being measured or +/- 2.5 degrees Celsius. The recording device shall also calculate the three-hour block average combustion chamber temperature.	Minn. R. 7007.0800, subp. 4 and 5
Inspections: At least once every 18 months, or as recommended by the manufacturer, the Permittee shall inspect the control equipment internal and external system components, including but not limited to the refractory, heat exchanger, and electrical systems. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subp. 4, 5, and 14
Annual Calibration: The Permittee shall calibrate the temperature monitor at least once every 18 months and shall maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subp. 4, 5, and 14
For periods when the thermal oxidizer is operated above the minimum combustion chamber temperature, the Permittee shall use either one of the following when completing calculations as required elsewhere in this permit: a. The overall control efficiency limit specified in this permit for this equipment (95%); or b. The overall control efficiency determined during the most recent MPCA approved performance test. If the tested efficiency is less than the efficiency limit in this permit, the Permittee must use the tested value in all calculations until the efficiency is demonstrated to be above the permit limit through a new test.	Minn. R. 7007.0800, subp. 4 and 5
Corrective Actions: If the temperature is below the minimum specified by this permit or if the thermal oxidizer or any of its components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall return the temperature to at least the permitted minimum and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the thermal oxidizer. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subp. 4, 5, and 14
The Permittee shall operate and maintain the thermal oxidizer in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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
  - EU 128 5th Fermenter

What to do	Why to do it
<b>A. EMISSION LIMITS</b>	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
Volatile Organic Compounds: greater than or equal to 95 percent collection efficiency or less than or equal to 20 ppmv,d	Title I Condition: BACT, 40 CFR Section 52.21(j); Minn. R. 7007.3000
<b>B. EMISSION TESTING AND MONITORING REQUIREMENTS</b>	hdr
Performance Test: due before end of each 60 months starting 07/17/2001 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
Performance Test: due before end of each 60 months starting 07/20/2007 to measure VOC emission	Title I Condition: BACT, 40 CFR Section 52.21(j); Minn. R. 7007.3000
<b>C. EMISSION UNIT OPERATION (EU037 - EU048, EU060, EU128)</b>	hdr
Production: less than or equal to 52770240 gallons/year using 12-month Rolling Sum of 200 proof fuel ethanol (finished, distilled product, prior to addition of denaturant).	Minn. R. 7017.2025, subp. 3
Recordkeeping: The Permittee shall calculate and record the total ethanol production for the previous 12-month period by the 15th day of each month.	Minn. R. 7007.0800 subp. 5
<b>D. CONTROL EQUIPMENT OPERATION (CE030 &amp; CE031 - packed gas absorption columns)</b>	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)
Pressure Drop: greater than or equal to 2.0 inches of water column and less than or equal to 25.0 inches of water column combined across CE030 and CE031	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Water flow rate: greater than or equal to 130 gallons/minute (for recirculating water to CE031) and greater than or equal to 20 gallons per minute (for fresh water makeup) to CE030)	Title I Condition: Monitoring for 40 CFR Section 52.21(k)
Recordkeeping of Pressure Drop: Once each operating day, read and record pressure drop.  If the pressure drop is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

<p>Recordkeeping of Water Flow Rate: Once each operating day, read and record the water flow rate.</p> <p>If the water flow rate is not equal to or above the specified minimum, the Permittee may compute a 1-hour average water flow rate from data records including the observation outside the specified range, to determine if the 1-hour average is equal to or above the specified minimum. The 1-hour average must consist of at least 4 records. If the 1-hour average is not equal to or above the specified minimum, perform corrective actions.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)</p>
<p>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.</p>	<p>Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)</p>
<p>Scrubbing liquid temperature: Install, maintain, and operate a temperature measuring and recording instrument for the temperature of the scrubbing liquid leaving the scrubber.</p>	<p>40 CFR pt. 63, subp. FFFF, Table I 40 CFR Section 63.993(c)</p>
<p>Scrubbing liquid specific gravity: Install, maintain, and operate a specific gravity measuring and recording instrument for the specific gravity of the scrubbing liquid leaving the scrubber.</p>	<p>40 CFR pt. 63, subp. FFFF, Table I 40 CFR Section 63.993(c)</p>
<p>Monitoring equipment shall be installed, calibrated, maintained, and operated according to the manufacturer's specifications.</p>	<p>40 CFR Section 63.996(c)(1)</p>
<p>The Permittee shall insure the immediate repair or replacement of monitor parts to correct malfunctions.</p>	<p>40 CFR Section 63.996(c)(2)(i)</p>
<p>Monitors shall be installed and operational during any performance tests for SV015.</p>	<p>40 CFR Section 63.996(c)(3)</p>
<p>The Permittee shall establish a range for monitored parameters that indicates proper operation of the control/recovery device. The range shall be recorded in the O and M Plan.</p>	<p>40 CFR Section 63.996(c)(6)</p>
<p>Malfunctions shall be corrected as soon as practicable after their occurrence.</p>	<p>40 CFR Section 63.6(e)(l)(ii); Minn. R. 7011.7000</p>
<p>Recordkeeping: The Permittee shall maintain files of all information required by 40 CFR pt. 63 in a form suitable and readily available for expeditious inspection and review.</p> <p>The files should be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Only the most recent two years of information must be kept on site.</p>	<p>40 CFR Section 63.10(b)(1); Minn. R. 7019.0100, subp. 2(B)</p>
<p>The Permittee shall maintain, at a minimum, the following information in the files:</p> <p>3) all maintenance performed on the recovery or pollution control equipment;</p> <p>7) all required measurements needed to demonstrate compliance with a relevant standard;</p> <p>8) all results of performance test, CMS performance evaluations, and opacity and visible emission observations;</p> <p>9) all measurements as may be necessary to determine the conditions of performance tests and performance evaluations;</p> <p>12) any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements under this part</p>	<p>40 CFR Section 63.10(b)(2); Minn. R. 7019.0100, subp. 2(B)</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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)

MR 007 NOx 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 0.40 lbs/million Btu heat input	Minn. R. 7011.0515, subp. 1
Particulate Matter < 10 micron: less than or equal to 0.060 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 ( = 1.2 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 4.0 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
Emissions Monitoring: The owner or operator shall use a sulfur dioxide 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
Emissions Monitoring: The owner or operator shall use a NOx CEMS to measure NOx emissions from SV 016.	Minn. R. 7017.1006
CEMS Installation: Install a NOx CEMS.	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 1.0 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

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

A-40

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

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 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 0.10 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 0.50 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.  If the pressure drop is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	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

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.030 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 0.30 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 0.030 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 0.10 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.  If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.030 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 0.30 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 0.030 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 0.10 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.  If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.30 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 0.10 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 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)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.40 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 0.10 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 12/05/2003 to measure PM10 emissions. The first test is due December 5, 2003, 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 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
Performance Test: due before end of each 60 months starting 01/31/2003 to measure NOx 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
Performance Test: due before end of each 60 months starting 01/31/2003 to measure 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

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

A-45

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

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)



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

A-46

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.50 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**

A-47

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**Subject Item: SV 022 Wastewater Treatment 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 60 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
The Permittee shall vent biogas to the Wastewater Treatment Plant Flare (SV 022) less than or equal to 700 hours per year calculated as a 12-month rolling sum.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
B. EMISSION TESTING AND MONITORING REQUIREMENTS -- N/A	hdr
Record the number of hours biogas is vented to the flare daily. The Permittee shall calculate the number of hours that biogas was vented to the flare by the 15th of each month for the previous 12-month period.	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.30 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 0.0050 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
Volatile Organic Compounds: less than or equal to 5.3 lbs/hour measured as total mass of VOC.	Consent Decree para. 39
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)
Performance Test: due before end of each 60 months starting 10/03/2006 to measure VOC emissions from the stack. The first test is due October 3, 2011, then every 60 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each 60 months starting 09/26/2005 to measure total particulate matter emissions at the stack. The first test is due September 26, 2005, 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
Performance Test: due before end of each 36 months starting 09/26/2003 to measure PM10 emissions from the stack. The first test is due September 26, 2003, then every 36 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 (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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.10 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.  If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions. □	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.30 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 0.0090 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)
Performance Test: due before end of each 60 months starting 09/26/2005 to measure total particulate matter emissions at the stack. The first test is due September 26, 2005, 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
Performance Test: due before end of each 60 months starting 09/26/2005 to measure PM10 emissions at the stack. The first test is due September 26, 2005, 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 (EU068)	hdr
Process Throughput: less than or equal to 48950 bushel/hour using 24-hour Block Average of corn fines. Downtime of 15 minutes or more is not to be counted as operating time.	Minn. R. 7017.2025
Recordkeeping of Throughput: Each day, calculate the amount of corn fines processed for the previous day, in bushels per hour. Divide the total amount of corn fines by the hours of operating time. Do not count downtime of 15 minutes or more as operating time.	Minn. R. 707.0800, subp. 5
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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**Subject Item: SV 030 Rotary Cooler**

**Associated Items:** EU 023 Rotary Cooler

EU 119 Dryer #2 Baghouse

EU 120 Dryer #1 Baghouse

EU 121 Dryer #3 Baghouse

EU 122 Dryers #5 Baghouse

EU 124 Dryer #4 Baghouse

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 5.04 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 0.30 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 5.04 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 0.011 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Volatile Organic Compounds: less than or equal to 4.9 lbs/hour measured as total mass of VOC.	Consent Decree para. 39
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)
Performance Test: due before end of each 60 months starting 10/10/2006 to measure VOC emissions at the stack. The first test is due October 04, 2011, then every 60 months thereafter.  For additional applicable performance test requirements, see "General Performance Test Requirements" in Table A, Subject Item "Total Facility".	Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each calendar 60 months starting 06/27/2001 to measure total particulate matter emissions.  For additional applicable performance testing 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
Performance Test: due before end of each calendar 60 months starting 06/27/2001 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, EU124)	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)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

A-52

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

Pressure Drop: greater than or equal to 0.10 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)
<p>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.</p> <p>If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions. □</p>	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.60 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 0.30 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 0.60 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 0.0070 grains/actual cubic foot	Title I Condition: 40 CFR Section 52.21(k); Minn. R. 7007.3000
Volatile Organic Compounds: less than or equal to 7.2 lbs/hour measured as total mass of VOC.	Consent Decree para. 39
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
Performance Test: due before end of each calendar 60 months starting 06/26/2001 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. 7007.0200 (Testing for permit limit) and Minn. R. 7017.2020, subp. 1
Performance Test: due before end of each calendar 60 months starting 06/26/2001 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 0.10 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.  If the pressure drop is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	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.  If the water flow rate is not within the specified range, the Permittee may compute a 1-hour average water flow rate from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

A-54

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

<p>Recordkeeping of pH: Once each operating day, read and record the pH.</p> <p>If the pH is not within the specified range, the Permittee may compute a 1-hour average pH from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions.</p>	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)
<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 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.</p>	Title I Condition: Recordkeeping of Monitoring for 40 CFR Section 52.21(k)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.30 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 0.10 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.  If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions. □	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.080 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 0.30 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 0.080 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 0.10 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.  If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions. □	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.30 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 0.10 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.  If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions. □	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.30 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 0.10 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.  If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions. □	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.010 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 0.40 lbs/million Btu heat input	Minn. R. 7011.0515, subp. 1
Particulate Matter < 10 micron: less than or equal to 0.010 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 0.010 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 0.10 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 0.040 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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.010 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 0.30 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 0.010 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 0.0050 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 0.010 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 0.20 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**

A-61

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.040 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 0.30 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 0.040 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 0.0080 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 0.10 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.  If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions. □	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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 0.10 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 0.30 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 0.10 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 0.0090 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 0.10 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.  If the pressure drop is observed and is not within the specified range, the Permittee may compute a 1-hour average pressure drop from data records including the observation outside the specified range, to determine if the 1-hour average is within the specified range. The 1-hour average must consist of at least 4 records. If the 1-hour average is not within the specified range, perform corrective actions. □	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**

A-63

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**Subject Item: SV 044 MVR Feed Tank**

<b>What to do</b>	<b>Why to do it</b>
Volatile Organic Compounds: less than or equal to 6.0 lbs/hour using 3-hour Average	Consent Decree Para. 39

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

A-64

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**Subject Item:** EU 127 Gluten Dryer #2**Associated Items:** CE 021 Spray Tower

SV 011 Gluten Dryer (CE021)

<b>What to do</b>	<b>Why to do it</b>
Recordkeeping: Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility including; 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), Minn. R. 7019.0100, subp. 1

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

A-65

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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**

A-66

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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**

A-68

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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**

A-69

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**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**

A-70

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

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

What to do	Why to do it
<b>A. POLLUTION CONTROL REQUIREMENTS</b>	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>B. MONITORING REQUIREMENTS</b>	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)
<b>C. RECORDKEEPING REQUIREMENTS</b>	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)
<b>D. REPORTING REQUIREMENTS</b>	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**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**Subject Item: FS 002 Equipment in Organic HAP Service Leak Detection and Repair**

What to do	Why to do it
40 CFR Part 63, Subpart UU requirements	hdr
EQUIPMENT IDENTIFICATION	hdr
<p>Equipment Identification, General:</p> <p>Equipment subject to these requirements shall be identified. Identification of the equipment may use physical tagging of the equipment, identification on a plant site plan, in log entries, by designation of process unit or affected facility boundaries by some form of weatherproof identification, or by other appropriate methods.</p>	40 CFR Section 63.1022(a)
<p>Equipment Identification for Specific Equipment:</p> <p>In addition to the general identification required above, equipment subject to any of the provisions in 40 CFR Sections 63.1023 through 63.1034 shall be specifically identified as required in paragraphs (b)(1) through (b)(5) following, as applicable. This paragraph does not apply to an owner or operator of a batch product process who elects to pressure test the batch product process equipment train pursuant to 40 CFR Section 63.1036.</p>	40 CFR Section 63.1022(b)
<p>Connectors: Except for inaccessible, ceramic, or ceramic-lined connectors meeting the provision of 40 CFR Section 63.1027(e)(2) and instrumentation systems identified pursuant to paragraph (b)(4) following, identify the connectors subject to the requirements of this subpart. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the identification shall be complete no later than the completion of the initial survey.</p>	40 CFR Section 63.1022(b)(1)
<p>Emissions routed to a process or fuel gas system or equipped with a closed vent system and control device:</p> <p>Identify the equipment that the Permittee elects to route to a process or fuel gas system or equip with a closed vent system and control device, under the provisions of 40 CFR Section 63.1026(e)(3) (pumps in light liquid service), Section 63.1028(e)(3) (agitators), Section 63.1030(d) (pressure relief devices in gas and vapor service), Section 63.1031(e) (compressors), or Section 63.1037(a) (alternative means of emission limitation for enclosed-vented process units).</p>	40 CFR Section 63.1022(b)(2)
<p>Pressure Relief Devices: Identify the pressure relief devices equipped with rupture disks, under the provisions of 40 CFR Section 63.1030(e).</p>	40 CFR Section 63.1022(b)(3)
<p>Instrumentation: Identify instrumentation systems subject to the provisions of 40 CFR Section 63.1029 of this subpart. Individual components in an instrumentation system need not be identified.</p>	40 CFR Section 63.1022(b)(4)
<p>Equipment in service less than 300 hours per year: The identity, either by list, location (area or group), or other method, of equipment in regulated material service less than 300 hours per calendar year within a process unit or affected facilities subject to the provisions of this subpart shall be recorded.</p>	40 CFR Section 63.1022(b)(5)
INSTRUMENTAL AND SENSORY MONITORING FOR LEAKS	hdr
<p>(1) Instrument monitoring for leaks.</p> <p>(i) Valves in gas and vapor service and in light liquid service shall be monitored pursuant to 40 CFR Section 63.1025(b).</p> <p>(ii) Pumps in light liquid service shall be monitored pursuant to 40 CFR Section 63.1026(b).</p> <p>(iii) Connectors in gas and vapor service and in light liquid service shall be monitored pursuant to 40 CFR Section 63.1027(b).</p> <p>(iv) Agitators in gas and vapor service and in light liquid service shall be monitored pursuant to 40 CFR Section 63.1028(c).</p> <p>(v) Pressure relief devices in gas and vapor service shall be monitored pursuant to 40 CFR Section 63.1030(c).</p> <p>(vi) Compressors designated to operate with an instrument reading less than 500 parts per million above background, as described in 40 CFR Section 63.1022(e), shall be monitored pursuant to 40 CFR Section 63.1031(f).</p>	40 CFR Section 63.1023(a)(1)
<p>(2) Sensory monitoring for leaks.</p> <p>(i) Pumps in light liquid service shall be observed pursuant to 40 CFR Sections 63.1026(b)(4) and (e)(1)(v).</p> <p>(ii) [Reserved]</p> <p>(iii) Agitators in gas and vapor service and in light liquid service shall be observed pursuant to 40 CFR Section 63.1028(c)(3) or (e)(1)(iv).</p>	40 CFR Section 63.1023(a)(2)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

<p>LEAK REPAIR</p>	<p>hdr</p>
<p>Leak repair schedule. The owner or operator shall repair each leak detected as soon as practical, but not later than 15 calendar days after it is detected, except as provided in 40 CFR Section 1024, paragraphs (d) and (e). A first attempt at repair as defined in this subpart shall be made no later than 5 calendar days after the leak is detected. First attempt at repair for pumps includes, but is not limited to, tightening the packing gland nuts and/or ensuring that the seal flush is operating at design pressure and temperature. First attempt at repair for valves includes, but is not limited to, tightening the bonnet bolts, and/or replacing the bonnet bolts, and/or tightening the packing gland nuts, and/or injecting lubricant into the lubricated packing.</p>	<p>40 CFR Section 63.1024(a)</p>
<p>Delay of repair.</p> <p>Delay of repair is allowed for any of the conditions specified in paragraphs (d)(1) through (d)(5) of this section. The owner or operator shall maintain a record of the facts that explain any delay of repairs and, where appropriate, why the repair was technically infeasible without a process unit shutdown.</p> <p>(1) Delay of repair of equipment for which leaks have been detected is allowed if repair within 15 days after a leak is detected is technically infeasible without a process unit or affected facility shutdown. Repair of this equipment shall occur as soon as practical, but no later than the end of the next process unit or affected facility shutdown, except as provided in paragraph (d)(5) of this section.</p> <p>(2) Delay of repair of equipment for which leaks have been detected is allowed for equipment that is isolated from the process and that does not remain in regulated material service.</p>	<p>40 CFR Section 63.1024(d)</p>
<p>(3) Delay of repair for valves, connectors, and agitators is also allowed if the provisions of paragraphs (d)(3)(i) and (d)(3)(ii) of this section are met.</p> <p>(i) The owner or operator determines that emissions of purged material resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair, and</p> <p>(ii) When repair procedures are effected, the purged material is collected and destroyed, collected and routed to a fuel gas system or process, or recovered in a control device complying with either 40 CFR Section 63.1034 or 40 CFR Section 63.1021(b) of this part.</p>	<p>40 CFR Section 63.1024(d) continued</p>
<p>(4) Delay of repair for pumps is also allowed if the provisions of paragraphs (d)(4)(i) and (d)(4)(ii) of this section are met.</p> <p>(i) Repair requires replacing the existing seal design with a new system that the owner or operator has determined under the provisions of 40 CFR Section 63.1035(d) will provide better performance or one of the specifications of paragraphs (d)(4)(i)(A) through (d)(4)(i)(C) of this section are met.          (A) A dual mechanical seal system that meets the requirements of 40 CFR Section 63.1026(e)(1) will be installed;          (B) A pump that meets the requirements of 40 CFR Section 63.1026(e)(2) will be installed; or          (C) A system that routes emissions to a process or a fuel gas system or a closed vent system and control device that meets the requirements of 40 CFR Section 63.1026(e)(3) will be installed; and</p> <p>(ii) Repair is completed as soon as practical, but not later than 6 months after the leak was detected.</p>	<p>40 CFR Section 63.1024(d) continued</p>
<p>(5) Delay of repair beyond a process unit or affected facility shutdown will be allowed for a valve if valve assembly replacement is necessary during the process unit or affected facility shutdown, and valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the second process unit or affected facility shutdown will not be allowed unless the third process unit or affected facility shutdown occurs sooner than 6 months after the first process unit or affected facility shutdown.</p>	<p>40 CFR Section 63.1024(d) continued</p>
<p>VALVES IN GAS AND VAPOR SERVICE AND IN LIGHT LIQUID SERVICE</p>	<p>hdr</p>
<p>Monitoring method. The valves shall be monitored to detect leaks by the method specified in 40 CFR Section 63.1023(b) and, as applicable, 40 CFR Section 63.1023(c).</p>	<p>40 CFR Section 63.1025(b)(1)</p>
<p>Instrument reading that defines a leak. The instrument reading that defines a leak is 500 parts per million or greater.</p>	<p>40 CFR Section 63.1025(b)(2)</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

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<p>Monitoring frequency. The owner or operator shall monitor valves for leaks at the intervals specified in paragraphs (b)(3)(i) through (b)(3)(v) following and shall keep the record specified in paragraph (b)(3)(vi) of this section.</p> <p>(i) If at least the greater of 2 valves or 2 percent of the valves in a process unit leak, as calculated according to paragraph (c) of this section, the owner or operator shall monitor each valve once per month.</p>	<p>40 CFR Section 63.1025(b)(3)</p>
<p>(ii) At process units with less than the greater of 2 leaking valves or 2 percent leaking valves, the owner or operator shall monitor each valve once each quarter, except as provided in paragraphs (b)(3)(iii) through (b)(3)(v) of this section. Monitoring data generated before the regulated source became subject to the referencing subpart and meeting the criteria of either 40 CFR Section 63.1023(b)(1) through (b)(5), or 40 CFR Section 63.1023(b)(6), may be used to qualify initially for less frequent monitoring under paragraphs (b)(3)(iii) through (b)(3)(v) of this section.</p>	<p>40 CFR Section 63.1025(b)(3) continued</p>
<p>(iii) At process units with less than 1 percent leaking valves, the owner or operator may elect to monitor each valve once every two quarters</p> <p>(iv) At process units with less than 0.5 percent leaking valves, the owner or operator may elect to monitor each valve once every four quarters.</p> <p>(v) At process units with less than 0.25 percent leaking valves, the owner or operator may elect to monitor each valve once every 2 years.</p> <p>(vi) The owner or operator shall keep a record of the monitoring schedule for each process unit.</p>	<p>40 CFR Section 63.1025(b)(3) continued</p>
<p><b>PUMPS IN LIGHT LIQUID SERVICE</b></p>	<p>hdr</p>
<p>Monitoring method and frequency. The pumps shall be monitored monthly to detect leaks by the method specified in 40 CFR Section 63.1023(b) and, as applicable, 40 CFR Section 63.1023(c).</p>	<p>40 CFR Section 63.1026(b)(1)</p>
<p>Instrument reading that defines a leak. The instrument reading that defines a leak is 1,000 parts per million or greater for all other pumps.</p> <p>Repair is required only if the instrument reading is 2,000 parts per million or greater.</p>	<p>40 CFR Section 63.1026(b)(2)</p>
<p>(4) Visual inspection. Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. The owner or operator shall document that the inspection was conducted and the date of the inspection. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in either paragraph (b)(4)(i) or (b)(4)(ii).</p>	<p>40 CFR Section 63.1026(b)(4)</p>
<p><b>CONNECTORS IN GAS AND VAPOR SERVICE AND IN LIGHT LIQUID SERVICE</b></p>	<p>hdr</p>
<p>Instrument reading that defines a leak. If an instrument reading greater than or equal to 500 parts per million is measured, a leak is detected.</p>	<p>40 CFR Section 63.1027(b)(2)</p>
<p>Monitoring periods. The owner or operator shall perform monitoring, subsequent to the initial monitoring required in paragraph (a) of this section, as specified in paragraphs (b)(3)(i) through (b)(3)(iii) of this section, and shall comply with the requirements of paragraphs (b)(3)(iv) and (b)(3)(v) of this section. The required period in which monitoring must be conducted shall be determined from paragraphs (b)(3)(i) through (b)(3)(iii) of this section using the monitoring results from the preceding monitoring period. The percent leaking connectors shall be calculated as specified in paragraph (c) of this section.</p>	<p>40 CFR Section 63.1027(b)(3)</p>
<p>(i) If the percent leaking connectors in the process unit was greater than or equal to 0.5 percent, then monitor within 12 months (1 year).</p> <p>(ii) If the percent leaking connectors in the process unit was greater than or equal to 0.25 percent but less than 0.5 percent, then monitor within 4 years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors within 2 years of the start of the monitoring period, provided all connectors have been monitored by the end of the 4 year monitoring period.</p>	<p>40 CFR Section 63.1027(b)(3), continued</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

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<p>(iii) If the percent leaking connectors in the process unit was less than 0.25 percent, then monitor as provided in paragraph (b)(3)(iii)(A) of this section and either paragraph (b)(3)(iii)(B) or (b)(3)(iii)(C) of this section, as appropriate.</p> <p>(A) An owner or operator shall monitor at least 50 percent of the connectors within 4 years of the start of the monitoring period.</p> <p>(B) If the percent leaking connectors calculated from the monitoring results in paragraph (b)(3)(iii)(A) of this section is greater than or equal to 0.35 percent of the monitored connectors, the owner or operator shall monitor as soon as practical, but within the next 6 months, all connectors that have not yet been monitored during the monitoring period. At the conclusion of monitoring, a new monitoring period shall be started pursuant to paragraph (b)(3) of this section, based on the percent leaking connectors of the total monitored connectors.</p>	<p>40 CFR Section 63.1027(b)(3), continued</p>
<p>(C) If the percent leaking connectors calculated from the monitoring results in paragraph (b)(3)(iii)(A) of this section is less than 0.35 percent of the monitored connectors, the owner or operator shall monitor all connectors that have not yet been monitored within 8 years of the start of the monitoring period.</p>	<p>40 CFR Section 63.1027(b)(3), continued</p>
<p>(iv) If, during the monitoring conducted pursuant to paragraph (b)(3)(i) through (b)(3)(iii) of this section, a connector is found to be leaking, it shall be re-monitored once within 90 days after repair to confirm that it is not leaking.</p> <p>(v) The owner or operator shall keep a record of the start date and end date of each monitoring period under this section for each process unit.</p>	<p>40 CFR Section 63.1027(b)(3), continued</p>
<p><b>AGITATORS IN GAS AND VAPOR SERVICE AND IN LIGHT LIQUID SERVICE</b></p>	<p>hdr</p>
<p>Instrument reading that defines a leak. If an instrument reading equivalent to 10,000 parts per million or greater is measured, a leak is detected.</p>	<p>40 CFR Section 63.1028(c)(2)</p>
<p>(3) Visual inspection.</p> <p>(i) Each agitator seal shall be checked by visual inspection each calendar week for indications of liquids dripping from the agitator seal. The owner or operator shall document that the inspection was conducted and the date of the inspection.</p> <p>(ii) If there are indications of liquids dripping from the agitator seal, the owner or operator shall follow the procedures specified in paragraphs (c)(3)(ii)(A) or (c)(3)(ii)(B) of this section prior to the next required inspection.</p> <p>(A) The owner or operator shall monitor the agitator seal as specified in 40 CFR Section 63.1023(b) and, as applicable, 40 CFR Section 63.1023(c), to determine if there is a leak of regulated material. If an instrument reading of 10,000 parts per million or greater is measured, a leak is detected, and it shall be repaired according to paragraph (d) of this section; or</p> <p>(B) The owner or operator shall eliminate the indications of liquids dripping from the agitator seal.</p>	<p>40 CFR Section 63.1028(c)(3)</p>
<p><b>PRESSURE RELIEF DEVICES IN GAS AND VAPOR SERVICE</b></p>	<p>hdr</p>
<p>(b) Except during pressure releases as provided for in paragraph (c) of this section, or as otherwise specified in 40 CFR Sections 63.1036, 63.1037, or paragraphs (d) and (e) of this section, each pressure relief device in gas and vapor service shall be operated with an instrument reading of less than 500 parts per million as measured by the method specified in 40 CFR Section 63.1023(b) and, as applicable, 40 CFR Section 63.1023(c).</p>	<p>40 CFR Section 63.1030(b)</p>
<p>(c) Pressure relief requirements. (1) After each pressure release, the pressure relief device shall be returned to a condition indicated by an instrument reading of less than 500 parts per million, as soon as practical, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR Section 63.1024(d).</p>	<p>40 CFR Section 63.1030(c)(1)</p>
<p>(2) The pressure relief device shall be monitored no later than five calendar days after the pressure to confirm the condition indicated by an instrument reading of less than 500 parts per million above background, as measured by the method specified in 40 CFR Section 63.1023(b) and, as applicable, 40 CFR Section 63.1023(c).</p>	<p>40 CFR Section 63.1030(c)(2)</p>
<p><b>COMPRESSOR STANDARDS</b></p>	<p>hdr</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

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<p>(b) Seal system standard. Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided in 63.1021(b), 63.1036, 63.1037, and paragraphs (e) and (f) of this section. Each compressor seal system shall meet the applicable requirements specified in paragraph (b)(1), (b)(2), or (b)(3) following.</p> <p>(1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure at all times (except during periods of startup, shutdown, or malfunction); or</p> <p>(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed-vent system to a control device that meets the requirements of either 63.1034 or 63.1021(b); or</p> <p>(3) Equipped with a closed-loop system that purges the barrier fluid directly into a process stream.</p>	<p>40 CFR Section 63.1031(b)</p>
<p>(c) Barrier fluid system. The barrier fluid shall not be in light liquid service. Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. Each sensor shall be observed daily or shall be equipped with an alarm unless the compressor is located within the boundary of an unmanned plant site.</p>	<p>40 CFR Section 63.1031(c)</p>
<p>(d) Failure criterion and leak detection. (1) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion, a leak is detected and shall be repaired pursuant to 63.1024, as applicable.</p>	<p>40 CFR Section 63.1031(d)</p>
<p>SAMPLING CONNECTION SYSTEMS</p>	<p>hdr</p>
<p>(b) Equipment requirement. Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed vent system, except as provided in 40 CFR Sections 63.1021(b), 63.1036, 63.1037, or paragraph (d) following. Gases displaced during filling of the sample container are not required to be collected or captured.</p>	<p>40 CFR Section 63.1032(b)</p>
<p>(c) Equipment design and operation. Each closed-purge, closed-loop, or closed vent system as required in paragraph (b) of this section shall meet the applicable requirements specified in paragraphs (c)(1) through (c)(5) of this section.</p> <p>(1) The system shall return the purged process fluid directly to a process line or to a fuel gas system that meets the requirements of either 40 CFR Section 63.1034 or 63.1021(b); or</p> <p>(2) [Reserved]</p> <p>(3) Be designed and operated to capture and transport all the purged process fluid to a control device that meets the requirements of either 40 CFR Section 63.1034 or 63.1021(b); or</p>	<p>40 CFR Section 63.1032(c)</p>
<p>(4) Collect, store, and transport the purged process fluid to a system or facility identified in paragraph (c)(4)(i), (c)(4)(ii), or (c)(4)(iii) of this section.</p> <p>(i) A waste management unit as defined in 40 CFR 63.111 or subpart G, if the waste management unit is subject to and operating in compliance with the provisions of 40 CFR part 63, subpart G, applicable to group 1 wastewater streams. If the purged process fluid does not contain any regulated material listed in Table 9 of 40 CFR part 63, subpart G, the waste management unit need not be subject to, and operated in compliance with the requirements of 40 CFR part 63, subpart G, applicable to group 1 wastewater streams provided the facility has a National Pollution Discharge Elimination System (NPDES) permit or sends the wastewater to an NPDES-permitted facility.</p> <p>(ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR parts 262, 264, 265, or 266; or</p>	<p>40 CFR Section 63.1032(c), continued</p>
<p>(iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.</p> <p>(5) Containers that are part of a closed purge system must be covered or closed when not being filled or emptied.</p>	<p>40 CFR Section 63.1032(c), continued</p>
<p>OPEN-ENDED VALVES OR LINES</p>	<p>hdr</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

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<p>(b) Equipment and operational requirements.</p> <p>(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR Sections 63.1021(b), 63.1036, 63.1037, and paragraphs (c) and (d) of this section. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance. The operational provisions of paragraphs (b)(2) and (b)(3) of this section also apply.</p> <p>(2) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.</p> <p>(3) When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (b)(1) of this section at all other times.</p>	<p>40 CFR Section 63.1033(b)</p>
<p><b>CLOSED VENT SYSTEMS AND CONTROL DEVICES; EMISSIONS ROUTED TO A FUEL GAS SYSTEM OR PROCESS</b></p>	<p>hdr</p>
<p>(b) Compliance standard.</p> <p>(1) Owners or operators routing emissions from equipment leaks to a fuel gas system or process shall comply with the provisions of 40 CFR 63, subpart SS, except as provided in 40 CFR Section 63.1002(b).</p> <p>(2) Owners or operators of closed vent systems and control devices used to comply with the provisions of this subpart shall comply with the provisions of subpart SS and (b)(2)(i) through (b)(2)(iii) of this section, except as provided in 40 CFR Section 63.1002(b).</p> <p>(i) Nonflare control devices shall be designed and operated to reduce emissions of regulated material vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent. The 20 parts per million by volume standard is not applicable to the provisions of 40 CFR Section 63.1016.</p>	<p>40 CFR Section 63.1034(b)</p>
<p>(ii) Enclosed combustion devices shall be designed and operated to reduce emissions of regulated material vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent, or to provide a minimum residence time of 0.50 seconds at a minimum temperature of 760°C (1400°F).</p> <p>(iii) Flares used to comply with the provisions of this subpart shall comply with the requirements of subpart SS.</p>	<p>40 CFR Section 63.1034(b), continued</p>
<p><b>RECORDKEEPING</b></p>	<p>hdr</p>
<p>(b) General equipment leak records.</p> <p>(1) As specified in 40 CFR Section 63.1022(a) and (b), the owner or operator shall keep general and specific equipment identification if the equipment is not physically tagged and the owner or operator is electing to identify the equipment subject to this subpart through written documentation such as a log or other designation.</p> <p>(2) The owner or operator shall keep a written plan as specified in 40 CFR Section 63.1022(c)(4) for any equipment that is designated as unsafe- or difficult-to-monitor.</p> <p>(3) The owner or operator shall maintain a record of the identity and an explanation as specified in 40 CFR Section 63.1022(d)(2) for any equipment that is designated as unsafe-to-repair.</p>	<p>40 CFR Section 63.1038(b)</p>
<p>(4) As specified in 40 CFR Section 63.1022(e), the owner or operator shall maintain the identity of compressors operating with an instrument reading of less than 500 parts per million.</p> <p>(5) The owner or operator shall keep records associated with the determination that equipment is in heavy liquid service as specified in 40 CFR Section 63.1022(f).</p> <p>(6) The owner or operator shall keep records for leaking equipment as specified in 40 CFR Section 63.1023(e)(2).</p> <p>(7) The owner or operator shall keep records for leak repair as specified in 40 CFR Section 63.1024(f) and records for delay of repair as specified in 40 CFR Section 63.1024(d).</p>	<p>40 CFR Section 63.1038(b), continued</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

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<p>(c) Specific equipment leak records.</p> <p>(1) For valves, the owner or operator shall maintain the records specified in paragraphs (c)(1)(i) and (c)(1)(ii) following.                  (i) The monitoring schedule for each process unit as specified in 40 CFR Section 63.1025(b)(3)(vi).                  (ii) The valve subgrouping records specified in 40 CFR Section 63.1025(b)(4)(iv), if applicable.</p> <p>(2) For pumps, the owner or operator shall maintain the records specified in paragraphs (c)(2)(i) through (c)(2)(iii) following.                  (i) Documentation of pump visual inspections as specified in 40 CFR Section 63.1026(b)(4).                  (ii) Documentation of dual mechanical seal pump visual inspections as specified in 40 CFR Section 63.1026(e)(1)(v).                  (iii) For the criteria as to the presence and frequency of drips for dual mechanical seal pumps, records of the design criteria and explanations and any changes and the reason for the changes, as specified in 40 CFR Section 63.1026(e)(1)(i).</p>	<p>40 CFR Section 63.1038(c)</p>
<p>(3) For connectors, the owner or operator shall maintain the monitoring schedule for each process unit as specified in 40 CFR Section 63.1027(b)(3)(v).</p> <p>(4) For agitators, the owner or operator shall maintain the following records:                  (i) Documentation of agitator seal visual inspections as specified in 40 CFR Section 63.1028; and                  (ii) For the criteria as to the presence and frequency of drips for agitators, the owner or operator shall keep records of the design criteria and explanations and any changes and the reason for the changes, as specified in 40 CFR Section 63.1028(e)(1)(vi).</p> <p>(5) For pressure relief devices in gas and vapor or light liquid service, the owner or operator shall keep records of the dates and results of monitoring following a pressure release, as specified in 40 CFR Section 63.1030(c)(3).</p>	<p>40 CFR Section 63.1038(c), continued</p>
<p>(6) For compressors, the owner or operator shall maintain the records specified in paragraphs (c)(6)(i) and (c)(6)(ii) following.</p> <p>(i) For criteria as to failure of the seal system and/or the barrier fluid system, record the design criteria and explanations and any changes and the reason for the changes, as specified in 40 CFR Section 63.1031(d)(2).</p> <p>(ii) For compressors operating under the alternative compressor standard, record the dates and results of each compliance test as specified in 40 CFR Section 63.1031(f)(2).</p>	<p>40 CFR Section 63.1038(c), continued</p>
<p>(7) For a pump QIP program, the owner or operator shall maintain the records specified in paragraphs (c)(7)(i) through (c)(7)(v) following.</p> <p>(i) Individual pump records as specified in 40 CFR Section 63.1035(d)(2).</p> <p>(ii) Trial evaluation program documentation as specified in 40 CFR Section 63.1035(d)(6)(iii).</p> <p>(iii) Engineering evaluation documenting the basis for judgement that superior emission performance technology is not applicable as specified in 40 CFR Section 63.1035(d)(6)(vi).</p> <p>(iv) Quality assurance program documentation as specified in 40 CFR Section 63.1035(d)(7).</p> <p>(v) QIP records as specified in 40 CFR Section 63.1035(e).</p>	<p>40 CFR Section 63.1038(c), continued</p>
<p>(8) For process units complying with the batch process unit alternative, the owner or operator shall maintain the records specified in paragraphs (c)(8)(i) and (c)(8)(ii) following.</p> <p>(i) Pressure test records as specified in 40 CFR Section 63.1036(b)(7).</p> <p>(ii) Records for equipment added to the process unit as specified in 40 CFR Section 63.1036(d).</p> <p>(9) For process units complying with the enclosed-vented process unit alternative, the owner or operator shall maintain the records for enclosed-vented process units as specified in 40 CFR Section 63.1037(b).</p>	<p>40 CFR Section 63.1038(c), continued</p>
<p>REPORTING</p>	<p>hdr</p>



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

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<p>(b) Periodic Reports. The owner or operator shall report the information specified in paragraphs (b)(1) through (b)(8) following, as applicable, in the Periodic Report specified in the referencing subpart.</p>	<p>40 CFR Section 63.1039(b)</p>
<p>(1) For the equipment specified in paragraphs (b)(1)(i) through (b)(1)(v) of this section, report in a summary format by equipment type, the number of components for which leaks were detected and for valves, pumps and connectors show the percent leakers, and the total number of components monitored. Also include the number of leaking components that were not repaired as required by 40 CFR Section 63.1024, and for valves and connectors, identify the number of components that are determined by 63.1025(c)(3) to be nonrepairable.</p> <p>(i) Valves in gas and vapor service and in light liquid service pursuant to 40 CFR Section 63.1025(b) and (c).</p> <p>(ii) Pumps in light liquid service pursuant to 40 CFR Section 63.1026(b) and (c).</p> <p>(iii) Connectors in gas and vapor service and in light liquid service pursuant to 40 CFR Section 63.1027(b) and (c).</p> <p>(iv) Agitators in gas and vapor service and in light liquid service pursuant to 40 CFR 63.1028(c).</p> <p>(v) Compressors pursuant to 63.1031(d).</p>	<p>40 CFR Section 63.1039(b), continued</p>
<p>(2) Where any delay of repair is utilized pursuant to 40 CFR Section 63.1024(d), report that delay of repair has occurred and report the number of instances of delay of repair.</p> <p>(3) If applicable, report the valve subgrouping information specified in 40 CFR Section 63.1025(b)(4)(iv).</p> <p>(4) For pressure relief devices in gas and vapor service pursuant to 40 CFR Section 63.1030(b) and for compressors pursuant to 40 CFR Section 63.1031(f) that are to be operated at a leak detection instrument reading of less than 500 parts per million, report the results of all monitoring to show compliance conducted within the semiannual reporting period.</p>	<p>40 CFR Section 63.1039(b), continued</p>
<p>(5) Report, if applicable, the initiation of a monthly monitoring program for valves pursuant to 40 CFR Section 63.1025(b)(3)(i).</p> <p>(6) Report, if applicable, the initiation of a quality improvement program for pumps pursuant to 40 CFR Section 63.1035.</p> <p>(7) Where the alternative means of emissions limitation for batch processes is utilized, report the information listed in 40 CFR Section 63.1036(f).</p> <p>(8) Report the information listed in paragraph (a) of this section for the Initial Compliance Status Report for process units or affected facilities with later compliance dates. Report any revisions to items reported in an earlier Initial Compliance Status Report if the method of compliance has changed since the last report.</p>	<p>40 CFR Section 63.1039(b), continued</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

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**Subject Item: MR 001 SO2 Monitor (Coal Boilers)**

**Associated Items:** CM 001 Boilers 1 and 2: 1.2 lbs SO2/mmBtu, EU049, EU050, SV016, 30 DRA; 0.46 lbNOx/MMBTU  
SV 016 Coal Boilers

What to do	Why to do it
<p>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.</p> <p>Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.</p>	<p>40 CFR Section 60.13(e)(6); Minn. R. 7017.1090, subp. 1</p>
<p>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.</p>	<p>Minn. R. 7017.1170, subp. 2</p>
<p>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.</p>	<p>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 an off-site storage facility 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. 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.</p>	<p>Minn. R. 7017.1170, subp. 5</p>
<p>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.</p>	<p>Minn. R. 7017.1170, subp. 4</p>
<p>Continuous Operation: CEMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment.</p> <p>Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.</p>	<p>Minn. R. 7017.1090, subp. 1</p>
<p>QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain all of the information required by 40CFR 60, App. F, section 3.</p>	<p>Minn. R. 7017.1170, subp. 2</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**Subject Item: MR 002 O2 Monitor (Coal Boilers)**

**Associated Items:** CM 001 Boilers 1 and 2: 1.2 lbs SO2/mmBtu, EU049, EU050, SV016, 30 DRA; 0.46 lbNOx/MMBTU  
SV 016 Coal Boilers

What to do	Why to do it
<p>The O2 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.</p> <p>Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.</p>	<p>40 CFR Section 60.13(e)(6); Minn. R. 7017.1090, subp. 1</p>
<p>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.</p>	<p>Minn. R. 7017.1170, subp. 2</p>
<p>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.</p>	<p>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 an off-site storage facility 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. 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.</p>	<p>Minn. R. 7017.1170, subp. 5</p>
<p>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.</p>	<p>Minn. R. 7017.1170, subp. 4</p>
<p>Continuous Operation: CEMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment.</p> <p>Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.</p>	<p>Minn. R. 7017.1090, subp. 1</p>
<p>QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain all of the information required by 40CFR 60, App. F, section 3.</p>	<p>Minn. R. 7017.1170, subp. 2</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**Subject Item: MR 003 NOx Monitor (Boiler #3)**

**Associated Items:** CM 002 Boiler 3: 0.1 lbs NOx/mmBtu, EU053, 30 DRA

SV 019 Boiler #3

What to do	Why to do it
<p>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.</p> <p>Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.</p>	<p>40 CFR Section 60.48b(c); 40 CFR Section 60.13(e)(6); Minn. R. 7011.0565; Minn. R. 7017.1090, subp. 1</p>
<p>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.</p>	<p>40 CFR Section 60.48b(d); Minn. R. 7011.0565</p>
<p>Span Value: 500 ppm</p>	<p>40 CFR Section 60.48b(e)(2); Minn. R. 7011.0565</p>
<p>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.</p>	<p>40 CFR pt. 60, Appendix F, section 3; Minn. R. 7017.1170, subp. 2</p>
<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 an off-site storage facility 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>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>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**Subject Item: MR 004 O2 Monitor (Boiler #3)**

**Associated Items:** CM 002 Boiler 3: 0.1 lbs NOx/mmBtu, EU053, 30 DRA  
SV 019 Boiler #3

What to do	Why to do it
<p>The O2 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.</p> <p>Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.</p>	<p>40 CFR Section 60.48b(c); 40 CFR Section 60.13(e)(6); Minn. R. 7011.0565; Minn. R. 7017.1090, subp. 1</p>
<p>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.</p>	<p>40 CFR Section 60.48b(d); Minn. R. 7011.0565</p>
<p>Span Value: 500 ppm</p>	<p>40 CFR Section 60.48b(e)(2); Minn. R. 7011.0565</p>
<p>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.</p>	<p>40 CFR pt. 60, Appendix F, section 3; Minn. R. 7017.1170, subp. 2</p>
<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 an off-site storage facility 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>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>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**Subject Item: MR 005 NOx Monitor (Boiler #4)**

**Associated Items:** CM 003 Boiler 4: 0.1 lbs NOx/mmBtu, EU054, 30 DRA  
SV 020 Boiler #4

What to do	Why to do it
<p>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.</p> <p>Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.</p>	<p>40 CFR Section 60.48b(c); 40 CFR Section 60.13(e)(6); Minn. R. 7011.0565; Minn. R. 7017.1090, subp. 1</p>
<p>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.</p>	<p>40 CFR Section 60.48b(d); Minn. R. 7011.0565</p>
<p>Span Value: 500 ppm</p>	<p>40 CFR Section 60.48b(e)(2); Minn. R. 7011.0565</p>
<p>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.</p>	<p>40 CFR pt. 60, Appendix F, section 3; Minn. R. 7017.1170, subp. 2</p>
<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 an off-site storage facility 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>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>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**Subject Item: MR 006 O2 Monitor (Boiler #4)**

**Associated Items:** CM 003 Boiler 4: 0.1 lbs NOx/mmBtu, EU054, 30 DRA

SV 020 Boiler #4

What to do	Why to do it
<p>The O2 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.</p> <p>Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.</p>	<p>40 CFR Section 60.48b(c); 40 CFR Section 60.13(e)(6); Minn. R. 7011.0565; Minn. R. 7017.1090, subp. 1</p>
<p>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.</p>	<p>40 CFR Section 60.48b(d); Minn. R. 7011.0565</p>
<p>Span Value: 500 ppm</p>	<p>40 CFR Section 60.48b(e)(2); Minn. R. 7011.0565</p>
<p>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.</p>	<p>40 CFR pt. 60, Appendix F, section 3; Minn. R. 7017.1170, subp. 2</p>
<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 an off-site storage facility 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>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>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

A-85

06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

**Subject Item: MR 007 NOx Monitor (Coal Boilers)**

**Associated Items:** CM 001 Boilers 1 and 2: 1.2 lbs SO2/mmBtu, EU049, EU050, SV016, 30 DRA; 0.46 lbNOx/MMBTU  
SV 016 Coal Boilers

What to do	Why to do it
<p>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.</p> <p>Acceptable monitor downtime includes reasonable periods as listed in Items A, B, C and D of Minn. R. 7017.1090, subp. 2.</p>	<p>40 CFR Section 60.48b(c); 40 CFR Section 60.13(e)(6); Minn. R. 7011.0565; Minn. R. 7017.1090, subp. 1</p>
<p>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.</p>	<p>40 CFR Section 60.48b(d); Minn. R. 7011.0565</p>
<p>Span Value: 500 ppm</p>	<p>40 CFR Section 60.48b(e)(2); Minn. R. 7011.0565</p>
<p>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.</p>	<p>40 CFR pt. 60, Appendix F, section 3; Minn. R. 7017.1170, subp. 2</p>
<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 an off-site storage facility 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>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>



**TABLE B: SUBMITTALS**

B-1 06/15/09

Facility Name: ADM Corn Processing - Marshall  
Permit Number: 08300038 - 008

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.

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 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

Send any application for a permit or permit amendment to:

AQ Permit Technical Advisor  
Industrial Division  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
St. Paul, Minnesota 55155-4194

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

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

AQ Compliance Tracking Coordinator  
Industrial Division  
Minnesota Pollution Control Agency  
520 Lafayette Road North  
St. Paul, Minnesota 55155-4194

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

B-2 06/15/09

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

<b>What to send</b>	<b>When to send</b>	<b>Portion of Facility Affected</b>
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup	EU127
Notification of the Date Construction Began	due 30 days after Start Of Construction including the design heat input capacity, identification of fuels to be used, a copy of any federally enforceable requirement limiting annual capacity factor for any fuel or fuel mixture, and the annual capacity factor at which operation is anticipated based on all fuels and each individual fuel.	EU127
Submittal	due 90 days after Initial Startup of a new emission unit subject to Section 112(j) of the Clean Air Act. By this deadline, the Permittee shall submit a Part 2 MACT Application meeting the requirements of 40 CFR Section 63.53(b).	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.	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

**TABLE B: RECURRENT SUBMITTALS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

What to send	When to send	Portion of Facility Affected
Cylinder Gas Audit (CGA) Results Summary	due 30 days after end of each calendar quarter following CEMS Cylinder Gas Audit (CGA)	MR001, MR002, MR003, MR004, MR005, MR006, MR007
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter following permit issuance of PER 007 (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.	MR007
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter starting 08/08/2000 (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.	MR003, MR004, MR005, MR006
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter starting 08/08/2000 (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of monitor bypass and all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions.	MR001, MR002
Quarterly Report	due 30 days after end of each calendar quarter starting 08/08/2000 . Report must contain all of the information listed in 40 CFR 60.49b(g).	SV020
Quarterly Report	due 30 days after end of each calendar quarter starting 08/16/2001 . Report must contain all of the information listed in 40 CFR 60.49b(g).	SV019
Relative Accuracy Test Audit (RATA) Notification	due before end of each calendar quarter following Permit Issuance in which a RATA is performed.	MR001, MR002, MR003, MR004, MR005, MR006, MR007
Relative Accuracy Test Audit (RATA) Results Summary	due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA)	MR001, MR002, MR003, MR004, MR005, MR006, MR007
Compliance Status Report	due 60 days after end of each calendar half-year following Initial Compliance Status Report describing compliance status of the fermentation scrubbers with 40 CFR 63, Subpart FFFF. This report may be submitted with the semiannual deviations report.	SV015
Compliance Status Report	due 60 days after end of each calendar half-year following Initial Compliance Status Report describing compliance status of the LDAR program with 40 CFR 63, Subpart FFFF. This report may be submitted with the semiannual deviations report.	FS002
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 08/08/2000 . 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

**TABLE B: RECURRENT SUBMITTALS**

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038 - 008

<p>Compliance Certification</p>	<p>due 30 days after end of each calendar year starting 08/08/2000 (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.</p> <p>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.</p> <p>The MPCA copy shall be sent to: Air Quality Compliance Tracking Coordinator, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, MN 55155.</p>	<p>Total Facility</p>
<p>Equipment List</p>	<p>due 30 days after end of each calendar year starting 08/16/2001. The equipment list shall include a complete description of each piece of equipment described by EU001, EU003, EU004, EU007, EU008, 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 number.</p> <p>If no equipment changes have been made since submittal of the previous equipment list, then submittal of a new equipment list is not required and only a statement that no equipment changes have been made is required to be submitted.</p>	<p>Total Facility</p>

## APPENDIX MATERIAL

Facility Name: ADM Corn Processing - Marshall

Permit Number: 08300038-008

### **Appendix I – Modeling Parameters Used for ADM-Marshall, Lyon County, Minnesota**

#### Hardcopy Report Submittal

PM10 Air Dispersion Modeling Analysis for the ADM facility in Marshall, Minnesota (December 2007, revised August 2008).

#### Electronic (CD-ROM) Submittal

ADM Marshall Input/Output Files for AERMOD, BPIP, and AERMAP, prepared by RTP Environmental Associates, Inc., December 2007 (revised August 2008).

#### Appendix III – Full Details

See CD-ROM for full data details.

#### Appendix III – Summary Report (A Computer-Generated “REPORT” Format with Simple Headers, Simple Sources, and Selected Parameters)

The summary report is for simple (constant) emission rates and corresponding stack/source parameters. It does not fully document details regarding model control options, emission rates with varying emission scalars, corresponding stack/source parameters, wind speed categories for wind erosion, building profile input program (BPIP) outputs, various output selections (e.g., EVENTFIL, MULTYEAR, PLOTFILE, POSTFILE, MAXIFILE), applicable “INCLUDED” file information, receptor grids, or other special features described in the following EPA modeling user guides:

AERMOD: <http://www.epa.gov/scram001/7thconf/aermod/aermodugb.pdf>

Note: Separate tables are shown for CO, NOX, SO2, and PM10. If any difference exists between summary values in this appendix vs. the hardcopy report vs. the electronic CD-ROM modeled values, the electronic CD-ROM modeled values prevail.

### **Supplemental Information for ADM-Marshall, Lyon County, Minnesota**

#### Site-Specific PM10 Emission Factor (Paved Roads – 2001 Study and 2003 Study)

The PM10 modeling reflects site-specific PM10 paved road emission factors as summarized below:

- 0.150 lb/vmt (2001 study without road cleaning) for slow and stop-and-go truck traffic;
- 0.057 lb/vmt (2003 study w/daily road cleaning) for corn trucks in stop-and-go traffic;
- 0.015 lb/vmt (2003 study w/daily road cleaning) for other slow-moving truck traffic;

Midwest Research Institute (MRI) conducted both studies using the exposure profiling method.

ADM Marshall

Permit No. 08300038-008

Appendix I – Page 1

### Daily Road Cleaning (Weather Permitting)

ADM-Marshall uses the Elgin Eagle to sweep/vacuum all haul roads every day (weather permitting).

- The sweeper is used 365 days per year (weather permitting). Each day of operation is logged on a spreadsheet. If the sweeper is not used, the operator must state the reason (usually rain, snow or ice) and print a weather report confirming the rain, snow, or ice event.

ADM-Marshall voluntarily implemented this procedure originally in 2003 and revised in 2008 in anticipation of MPCA reviewing both road emission model reports and approving lower emission factors and subsequent sweeper program as an enforceable part of the permit which potentially would include sweeping and periodic testing. MPCA is now acting on this request and has incorporated the following additional permit conditions:

- Posted signs with a speed limit of 5 MPH (to comport with 2001/2003 study conditions);
- Daily haul road cleaning with Elgin Eagle sweeper year-round.

Note: The Elgin Eagle meets South Coast Air Quality Management District (SCAQMD) Rule 1186 (80% control or better). For more information on the Elgin Eagle, please see: [http://www.elginsweeper.com/Eagle\\_1236.asp](http://www.elginsweeper.com/Eagle_1236.asp)

### Permit Application Modeling

The permit modeling included three gluten dryer operational scenarios. Since operational scenario number 1 resulted in the highest impacts only this scenario needs to be modeled in future studies. This operational scenario has flue gas from gas boilers #3 and #4 venting through the gluten dryer.

With the above assumptions (e.g., daily haul road cleaning) AERMOD modeling results indicate high-second-high (H2H) 24-hour PM10 increment consumption of 25.9, 25.9, 27.6, 25.7, and 24.0 ug/m<sup>3</sup> with respective 1986 to 1990 Sioux Falls (surface) and concurrent St. Cloud (upper air) meteorological data. Other pollutants are less than ambient standards and applicable PSD increment ceiling values by more than EPA-defined significant impact levels of 25 ug/m<sup>3</sup> (3-hour), 5 ug/m<sup>3</sup> (24-hour), and 1 ug/m<sup>3</sup> (annual).



TOTAL

55.56 440.94 1931.19



\*\*\* ISCST3 - VERSION 02035 \*\*\*

\*\*\* Minnesota Corn Processors Marshall Site 1986 NO2

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11/30/05

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\*\*This Run Includes: 102 Source(s); 3 Source Group(s); and 3123 Receptor(s)

AREA	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	XDIM (M)	YDIM (M)					
VOLUME	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	SYI (M)	SZI (M)					
AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	RADIUS	#VERTS.					
AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	#VERTS.	SZI (M)					
POINT	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	DIA (M)	DIA (FT)	DEG (K)	DEG (C)	DEG (F)	VS (M/S)	VS (F/M)

ACFM

POINT STK02	278807	4928804	348	0.00	0.00	0.00	61.30	201.12	1.140	3.740	283.	10.	50.	18.90	3720.47	40876
POINT STK03	278697	4928525	348	0.00	0.00	0.00	38.40	125.98	0.490	1.608	283.	10.	50.	0.01	1.97	4
POINT STK04	278801	4928779	348	0.00	0.00	0.00	36.60	120.08	0.460	1.509	283.	10.	50.	14.95	2942.91	5264
POINT STK05	278811	4928771	348	0.00	0.00	0.00	13.72	45.01	0.120	0.394	283.	10.	50.	25.01	4923.23	599
POINT STK06	278724	4928532	348	0.00	0.00	0.00	59.70	195.87	1.220	4.003	322.	49.	120.	20.21	3978.35	50059
POINT STK07	278670	4928569	348	0.00	0.00	0.00	45.90	150.59	1.520	4.987	311.	38.	100.	27.42	5397.64	105427
POINT STK08	278664	4928572	348	0.00	0.00	0.00	31.20	102.36	0.350	1.148	289.	16.	60.	0.01	1.97	2
POINT STK09	278716	4928571	348	0.00	0.00	0.00	50.30	165.03	0.910	2.986	322.	49.	120.	12.94	2547.24	17833
POINT STK10	278695	4928567	348	0.00	0.00	0.00	45.70	149.93	1.220	4.003	322.	49.	120.	20.21	3978.35	50059
POINT STK11	278710	4928648	348	0.39	3.07	13.45	56.10	184.06	2.510	8.235	339.	66.	150.	10.07	1982.28	105578
POINT STK12	278713	4928573	348	0.34	2.67	11.68	45.72	150.00	0.610	2.001	561.	288.	550.	8.09	1592.52	5010
POINT STK13	278681	4928349	348	0.43	3.38	14.80	42.30	138.78	0.610	2.001	361.	88.	190.	6.33	1246.06	3920
POINT STK14	278679	4928357	348	0.43	3.38	14.80	42.30	138.78	0.610	2.001	367.	94.	201.	7.90	1555.12	4892
POINT STK15	278827	4928590	348	0.00	0.00	0.00	24.39	80.02	0.460	1.509	305.	32.	89.	13.80	2716.54	4859
POINT STK16	278750	4928568	348	8.69	68.93	301.90	61.00	200.13	1.680	5.512	450.	177.	350.	15.82	3114.17	74305
POINT STK17	278745	4928612	348	0.00	0.00	0.00	18.30	60.04	0.170	0.558	283.	10.	50.	0.01	1.97	0
POINT STK18	278740	4928614	348	0.00	0.00	0.00	18.30	60.04	0.200	0.656	283.	10.	50.	0.01	1.97	1
POINT STK19	278724	4928598	348	2.81	22.31	97.71	45.72	150.00	1.520	4.987	446.	173.	343.	13.87	2730.31	53329
POINT STK20	278738	4928592	348	3.04	24.10	105.55	45.72	150.00	1.620	5.315	461.	188.	370.	17.48	3440.94	76343
POINT STK22	279171	4928575	348	0.07	0.55	2.41	30.00	98.43	0.380	1.247	1200.	927.	1700.	23.00	4527.56	5527
POINT STK23	278660	4928590	348	0.00	0.00	0.00	42.40	139.11	1.220	4.003	294.	21.	69.	15.36	3023.62	38046
POINT STK24	278802	4928799	348	0.00	0.00	0.00	37.60	123.36	0.200	0.656	283.	10.	50.	0.01	1.97	1
POINT STK25	278702	4928471	348	0.00	0.00	0.00	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0
POINT STK26	278705	4928477	348	0.00	0.00	0.00	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0
POINT STK27	278710	4928489	348	0.00	0.00	0.00	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0
POINT STK28	278714	4928501	348	0.00	0.00	0.00	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0
POINT STK29	278866	4928681	348	0.00	0.00	0.00	24.70	81.04	0.300	0.984	310.	37.	99.	0.01	1.97	1
POINT STK30	278667	4928586	348	0.00	0.00	0.00	44.20	145.01	1.070	3.510	315.	42.	107.	19.85	3907.48	37820
POINT STK31	278718	4928512	348	0.00	0.00	0.00	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0
POINT STK32	278723	4928527	348	0.00	0.00	0.00	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0
POINT STK33	278875	4928696	348	0.00	0.00	0.00	21.00	68.90	0.610	2.001	305.	32.	90.	16.17	3183.07	10013
POINT STK34	278662	4928578	348	0.00	0.00	0.00	30.80	101.05	1.520	4.987	289.	16.	60.	0.36	70.87	1384
POINT STK35	279180	4928440	348	0.00	0.00	0.00	10.50	34.45	0.130	0.427	283.	10.	50.	0.01	1.97	0
POINT STK36	279148	4928499	348	0.00	0.00	0.00	14.90	48.88	0.180	0.591	283.	10.	50.	0.01	1.97	1
POINT STK37	279148	4928505	348	0.00	0.00	0.00	15.20	49.87	0.180	0.591	283.	10.	50.	0.01	1.97	1
POINT STK38	279143	4928540	348	0.01	0.10	0.44	15.20	49.87	0.200	0.656	505.	232.	450.	4.02	791.34	268
POINT STK39	278812	4929079	348	0.03	0.20	0.88	4.70	15.42	0.510	1.673	450.	177.	350.	2.13	419.29	922
POINT STK41	278661	4928517	348	0.00	0.00	0.00	24.40	80.05	0.130	0.427	283.	10.	50.	20.04	3944.88	564
POINT STK43	278637	4928533	348	0.00	0.00	0.00	29.00	95.14	0.150	0.492	283.	10.	50.	36.22	7129.92	1356
TOTAL				16.21	128.69	563.62										

\*\*\* ISCST3 - VERSION 02035 \*\*\*

\*\*\* Minnesota Corn Processors Marshall Site 1986 SO2

\*\*\* 11/30/05

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\*\*This Run Includes: 106 Source(s); 11 Source Group(s); and 3123 Receptor(s)

AREA	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	XDIM (M)	YDIM (M)					
VOLUME	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	SYI (M)	SZI (M)					
AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	RADIUS	#VERTS.					
AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	#VERTS.	SZI (M)					
POINT	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	DIA (M)	DIA (FT)	DEG (K)	DEG (C)	DEG (F)	VS (M/S)	VS (F/M)

ACFM

POINT STK02	278807	4928804	348	0.00	0.00	0.00	61.30	201.12	1.140	3.740	283.	10.	50.	18.90	3720.47	40876
POINT STK03	278697	4928525	348	0.00	0.00	0.00	38.40	125.98	0.490	1.608	283.	10.	50.	0.01	1.97	4
POINT STK04	278801	4928779	348	0.00	0.00	0.00	36.60	120.08	0.460	1.509	283.	10.	50.	14.95	2942.91	5264
POINT STK05	278811	4928771	348	0.00	0.00	0.00	13.72	45.01	0.120	0.394	283.	10.	50.	25.01	4923.23	599
POINT STK06	278724	4928532	348	1.89	14.97	65.56	59.70	195.87	1.220	4.003	322.	49.	120.	20.21	3978.35	50059
POINT STK07	278670	4928569	348	3.02	23.93	104.81	45.90	150.59	1.520	4.987	311.	38.	100.	27.42	5397.64	105427
POINT STK08	278664	4928572	348	0.00	0.00	0.00	31.20	102.36	0.350	1.148	289.	16.	60.	0.01	1.97	2
POINT STK09	278716	4928571	348	0.75	5.98	26.19	50.30	165.03	0.910	2.986	322.	49.	120.	12.94	2547.24	17833
POINT STK10	278695	4928567	348	1.13	8.98	39.33	45.70	149.93	1.220	4.003	322.	49.	120.	20.21	3978.35	50059
POINT STK11	278710	4928648	348	1.39	11.00	48.18	56.10	184.06	2.510	8.235	339.	66.	150.	10.07	1982.28	105578
POINT STK11A	278710	4928648	348	0.00	0.00	0.00	56.10	184.06	2.510	8.235	339.	66.	150.	10.07	1982.28	105578
POINT STK12	278713	4928573	348	0.14	1.11	4.86	45.72	150.00	0.610	2.001	561.	288.	550.	8.09	1592.52	5010
POINT STK13	278681	4928349	348	0.25	2.00	8.76	42.30	138.78	0.610	2.001	361.	88.	190.	6.33	1246.06	3920
POINT STK14	278679	4928357	348	0.25	2.00	8.76	42.30	138.78	0.610	2.001	367.	94.	201.	7.90	1555.12	4892
POINT STK15	278827	4928590	348	0.07	0.52	2.28	24.39	80.02	0.460	1.509	305.	32.	89.	13.80	2716.54	4859
POINT STK163H	278750	4928568	348	31.78	252.22	1104.67	61.00	200.13	1.680	5.512	450.	177.	350.	15.82	3114.17	74305
POINT STK1624H	278750	4928568	348	20.39	161.80	708.65	61.00	200.13	1.680	5.512	450.	177.	350.	15.82	3114.17	74305
POINT STK17	278745	4928612	348	0.00	0.00	0.00	18.30	60.04	0.170	0.558	283.	10.	50.	0.01	1.97	0
POINT STK18	278740	4928614	348	0.00	0.00	0.00	18.30	60.04	0.200	0.656	283.	10.	50.	0.01	1.97	1
POINT STK19	278724	4928598	348	0.04	0.30	1.31	45.72	150.00	1.520	4.987	446.	173.	343.	13.87	2730.31	53329
POINT STK20	278738	4928592	348	0.05	0.40	1.75	45.72	150.00	1.620	5.315	461.	188.	370.	17.48	3440.94	76343
POINT STK22	279171	4928575	348	7.53	59.80	261.91	30.00	98.43	0.380	1.247	1200.	927.	1700.	23.00	4527.56	5527
POINT STK22A	279171	4928575	348	0.00	0.00	0.00	30.00	98.43	0.380	1.247	1200.	927.	1700.	23.00	4527.56	5527
POINT STK22LT	279171	4928575	348	0.75	5.98	26.17	30.00	98.43	0.380	1.247	1200.	927.	1700.	23.00	4527.56	5527
POINT STK23	278660	4928590	348	0.00	0.00	0.00	42.40	139.11	1.220	4.003	294.	21.	69.	15.36	3023.62	38046
POINT STK24	278802	4928799	348	0.00	0.00	0.00	37.60	123.36	0.200	0.656	283.	10.	50.	0.01	1.97	1
POINT STK25	278702	4928471	348	0.00	0.00	0.00	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0
POINT STK26	278705	4928477	348	0.00	0.00	0.00	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0
POINT STK27	278710	4928489	348	0.00	0.00	0.00	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0
POINT STK28	278714	4928501	348	0.00	0.00	0.00	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0
POINT STK29	278866	4928681	348	0.00	0.00	0.00	24.70	81.04	0.300	0.984	310.	37.	99.	0.01	1.97	1
POINT STK30	278667	4928586	348	0.00	0.00	0.00	44.20	145.01	1.070	3.510	315.	42.	107.	19.85	3907.48	37820
POINT STK31	278718	4928512	348	0.00	0.00	0.00	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0
POINT STK32	278723	4928527	348	0.00	0.00	0.00	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0
POINT STK33	278875	4928696	348	0.06	0.49	2.14	21.00	68.90	0.610	2.001	305.	32.	90.	16.17	3183.07	10013
POINT STK34	278662	4928578	348	0.00	0.00	0.00	30.80	101.05	1.520	4.987	289.	16.	60.	0.36	70.87	1384
POINT STK35	279180	4928440	348	0.00	0.00	0.00	10.50	34.45	0.130	0.427	283.	10.	50.	0.01	1.97	0
POINT STK36	279148	4928499	348	0.00	0.00	0.00	14.90	48.88	0.180	0.591	283.	10.	50.	0.01	1.97	1
POINT STK37	279148	4928505	348	0.00	0.00	0.00	15.20	49.87	0.180	0.591	283.	10.	50.	0.01	1.97	1
POINT STK38	279143	4928540	348	0.00	0.01	0.05	15.20	49.87	0.200	0.656	505.	232.	450.	4.02	791.34	268
POINT STK39	278812	4929079	348	0.00	0.01	0.05	4.70	15.42	0.510	1.673	450.	177.	350.	2.13	419.29	922

POINT STK41	278661	4928517	348	0.00	0.00	0.00	24.40	80.05	0.130	0.427	283.	10.	50.	20.04	3944.88	564
POINT STK43	278637	4928533	348	0.00	0.00	0.00	29.00	95.14	0.150	0.492	283.	10.	50.	36.22	7129.92	1356
TOTAL				69.49	551.50	2415.44										

\*\*\* ISCST3 - VERSION 02035 \*\*\*

\*\*\* ADM - Marshall Site WITH SEASONAL ROADS; BKGRND SOURCES  
\*\*\* INCREMENT AND NAAQS RUN FOR PM10

\*\*\* 09/05/08  
\*\*\* 08:47:46

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\*\*This Run Includes: 109 Source(s);

3 Source Group(s); and 3123 Receptor(s)

AREA	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	XDIM (M)	YDIM (M)								
VOLUME	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	SYI (M)	SZI (M)								
AREACIRC	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	RADIUS	#VERTS.								
AREAPOLY	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	#VERTS.	SZI (M)								
POINT	SRCIDNT	EASTING	NORTHING	ELEV (M)	G/SEC	#/HOUR	T/YEAR	HGT (M)	HGT (FT)	DIA (M)	DIA (FT)	DEG (K)	DEG (C)	DEG (F)	VS (M/S)	VS (F/M)			
POINT STK02	278807	4928804	348	0.46	3.62	15.85	61.30	201.12	1.140	3.740	283.	10.	50.	18.90	3720.47	40876			
POINT STK03	278697	4928525	348	0.09	0.71	3.11	38.40	125.98	0.490	1.608	283.	10.	50.	0.01	1.97	4			
POINT STK04	278801	4928779	348	0.06	0.46	2.02	36.60	120.08	0.460	1.509	283.	10.	50.	14.95	2942.91	5264			
POINT STK05	278811	4928771	348	0.01	0.06	0.26	13.72	45.01	0.120	0.394	283.	10.	50.	25.01	4923.23	599			
POINT STK06	278724	4928532	348	0.76	6.00	26.28	59.70	195.87	1.220	4.003	322.	49.	120.	20.21	3978.35	50059			
POINT STK07	278670	4928569	348	1.00	7.94	34.77	45.90	150.59	1.520	4.987	311.	38.	100.	27.42	5397.64	105427			
POINT STK08	278664	4928572	348	0.04	0.35	1.53	31.20	102.36	0.350	1.148	289.	16.	60.	0.01	1.97	2			
POINT STK09	278716	4928571	348	0.31	2.50	10.95	50.30	165.03	0.910	2.986	322.	49.	120.	12.94	2547.24	17833			
POINT STK10	278695	4928567	348	0.76	6.00	26.28	45.70	149.93	1.220	4.003	322.	49.	120.	20.21	3978.35	50059			
POINT STK11	278710	4928648	348	2.20	17.50	76.65	56.10	184.06	2.510	8.235	339.	66.	150.	10.07	1982.28	105578			
POINT STK12	278713	4928573	348	0.21	1.70	7.45	45.72	150.00	0.610	2.001	561.	288.	550.	8.09	1592.52	5010			
POINT STK13	278681	4928349	348	0.09	0.70	3.07	42.30	138.78	0.610	2.001	361.	88.	190.	6.33	1246.06	3920			
POINT STK14	278679	4928357	348	0.09	0.70	3.07	42.30	138.78	0.610	2.001	367.	94.	201.	7.90	1555.12	4892			
POINT STK15	278827	4928590	348	0.00	0.00	0.00	24.39	80.02	0.460	1.509	305.	32.	89.	13.80	2716.54	4859			
POINT STK16	278750	4928568	348	1.36	10.81	47.35	61.00	200.13	1.680	5.512	450.	177.	350.	15.82	3114.17	74305			
POINT STK17	278745	4928612	348	0.00	0.03	0.13	18.30	60.04	0.170	0.558	283.	10.	50.	0.01	1.97	0			
POINT STK18	278740	4928614	348	0.00	0.03	0.13	18.30	60.04	0.200	0.656	283.	10.	50.	0.01	1.97	1			
POINT STK19	278724	4928598	348	0.21	1.70	7.45	45.72	150.00	1.520	4.987	446.	173.	343.	13.87	2730.31	53329			
POINT STK20	278738	4928592	348	0.25	2.00	8.76	45.72	150.00	1.620	5.315	461.	188.	370.	17.48	3440.94	76343			
POINT STK22	279171	4928575	348	0.00	0.00	0.00	30.00	98.43	0.380	1.247	1200.	927.	1700.	23.00	4527.56	5527			
POINT STK23	278660	4928590	348	0.22	1.71	7.49	42.40	139.11	1.220	4.003	294.	21.	69.	15.36	3023.62	38046			
POINT STK24	278802	4928799	348	0.02	0.18	0.79	37.60	123.36	0.200	0.656	283.	10.	50.	0.01	1.97	1			
POINT STK25	278702	4928471	348	0.01	0.07	0.31	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0			
POINT STK26	278705	4928477	348	0.01	0.07	0.31	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0			
POINT STK27	278710	4928489	348	0.01	0.07	0.31	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0			
POINT STK28	278714	4928501	348	0.01	0.07	0.31	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0			
POINT STK29	278866	4928681	348	0.02	0.14	0.61	24.70	81.04	0.300	0.984	310.	37.	99.	0.01	1.97	1			
POINT STK30	278667	4928586	348	0.45	3.57	15.64	44.20	145.01	1.070	3.510	315.	42.	107.	19.85	3907.48	37820			
POINT STK31	278718	4928512	348	0.01	0.07	0.31	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0			
POINT STK32	278723	4928527	348	0.01	0.07	0.31	35.10	115.16	0.150	0.492	283.	10.	50.	0.01	1.97	0			
POINT STK33	278875	4928696	348	0.08	0.60	2.63	21.00	68.90	0.610	2.001	305.	32.	90.	16.17	3183.07	10013			
POINT STK34	278662	4928578	348	0.03	0.21	0.92	30.80	101.05	1.520	4.987	289.	16.	60.	0.36	70.87	1384			
POINT STK35	279180	4928440	348	0.01	0.08	0.35	10.50	34.45	0.130	0.427	283.	10.	50.	0.01	1.97	0			
POINT STK36	279148	4928499	348	0.02	0.13	0.57	14.90	48.88	0.180	0.591	283.	10.	50.	0.01	1.97	1			
POINT STK37	279148	4928505	348	0.02	0.13	0.57	15.20	49.87	0.180	0.591	283.	10.	50.	0.01	1.97	1			
POINT STK38	279143	4928540	348	0.00	0.01	0.05	15.20	49.87	0.200	0.656	505.	232.	450.	4.02	791.34	268			
POINT STK39	278812	4929079	348	0.00	0.01	0.05	4.70	15.42	0.510	1.673	450.	177.	350.	2.13	419.29	922			
POINT STK41	278661	4928517	348	0.00	0.04	0.17	24.40	80.05	0.130	0.427	283.	10.	50.	20.04	3944.88	564			
POINT STK43	278637	4928533	348	0.01	0.10	0.44	29.00	95.14	0.150	0.492	283.	10.	50.	36.22	7129.92	1356			
AREA AREA1	278733	4928663	348	0.16	1.24	5.44	3.00	9.84	100.00	100.00	(0.1565E-04	G/S/M2,	0.1000E+05	M2)	**STAR**				
AREA AREA1A	278733	4928663	348	0.03	0.22	0.96	3.00	9.84	100.00	100.00	(0.2768E-05	G/S/M2,	0.1000E+05	M2)	*HROFDY*				

AREA AREA2	278684	4928682	348	0.04	0.35	1.52	3.00	9.84	116.00	247.00	(0.1522E-05 G/S/M2, 0.2865E+05 M2)	*SEASHR*
AREA AREA3	278808	4928683	348	0.07	0.52	2.29	3.00	9.84	108.00	204.00	(0.2991E-05 G/S/M2, 0.2203E+05 M2)	*SEASHR*
AREA AREA4	278507	4928171	348	0.02	0.13	0.59	3.00	9.84	130.00	300.00	(0.4359E-06 G/S/M2, 0.3900E+05 M2)	*SEASHR*
AREA AREA5	279036	4928427	348	0.00	0.00	0.01	3.00	9.84	177.00	56.00	(0.3027E-07 G/S/M2, 0.9912E+04 M2)	*SEASHR*
AREA AREA6	278776	4928940	348	0.02	0.15	0.66	3.00	9.84	43.00	430.00	(0.1028E-05 G/S/M2, 0.1849E+05 M2)	*SEASHR*
TOTAL				9.17	72.76	318.67						
SUMP=				8.84	70.14	307.20						
SUMA=				0.33	2.62	11.47						
WNDA=				0.16	1.24	5.44						

## 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**  
**AIR EMISSION PERMIT NO. 08300038-008**  
**(major amendment to a Part 70 permit)**

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

**1. General Information**

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

Applicant/Address	Stationary Source/Address (SIC Code: 2046, 2869)
Archer Daniels Midland PO Box 1470 Decatur, IL 62525	400 W Erie Rd Marshall Lyon County
Contact: Mark Atkinson Phone: 507-537-2688	

**1.2. Description of the Permit Action**

ADM's Marshall corn processing facility is 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.

**1.3 Description of the Activities Allowed by this Permit Action**

ADM – Marshall has been under a federal Consent Decree to install a thermal oxidizer on carbon furnace no. 1 by end of 2007 to reduce VOC and CO emissions. ADM - Marshall also will be adding a venturi scrubber to have better PM control. ADM submitted a minor amendment application for installation of the scrubber and thermal oxidizer and MPCA staff has agreed that the installation qualifies as minor (based on control equipment rule). ADM has also submitted a major amendment application to install a new Gluten Dryer #2 (EU127), which will usually be operated in place of the older Gluten Dryer #1 (EU028). EU028 will remain in place as a backup dryer.

The previous permit contained a requirement to repeat dispersion modeling when certain types of changes are made. Because a PM10 emitting stack needed to be moved for installation of the thermal oxidizer, ADM - Marshall had to remodel PM10. Uncaptured fugitives from the truck

dump building, road dust, and cooling towers needed to be addressed as well as other sources of PM10. Modeled attainment of the NAAQS and PSD increment has been demonstrated.

This permit action changes PM10 emission limits for SV007, SV010, and SV030. Because the existing limits are Title I Conditions, a major amendment is required for these changes.

This permit action includes the following applications:

Tracking no. DQ 1201; installation of thermal oxidizer and adjustment of PM10 limits for stacks 007, 010 and 030

Tracking no. DQ 1419; administrative amendment to extend a test date

Tracking no. DQ 1611; administrative amendment to extend a test date

Tracking no. DQ 1709; major amendment for installation of new gluten dryer

Tracking no. DQ 1882 and 1962; reopenings to adjust operating parameters based on performance tests

**1.4 Facility Emissions:**

**Table 1. Non-Title I Emissions Increase Summary**

For SV007, SV010, SV012, and SV030

Pollutant	After Change (lb/hr)	Before Change (lb/hr)	Net Change (lb/hr)	Insignificant Modification Thresholds (lb/hr <)	Minor and Moderate Amendment Thresholds (lb/hr < or ≥)	Type of Amendment (Minor or Moderate)
PM <sub>10</sub>	30.54	36.71	-6.17	0.855	3.42	*
NO <sub>x</sub>	11.57	4.94	6.63	2.28	9.13	*
SO <sub>2</sub>	12.11	16.11	-4.0	2.28	9.13	*
CO	44.67	313.1	-268.4	5.70	22.80	*
VOC						*

\*Major Amendment required due to changing limits which are Title I Conditions.

Detailed table of hourly emissions changes:



	PM	PM10	SO2	NOx	CO	VOC
SV007 before	7.94	7.94	NC	NC	NC	NC
after	7.94	3.0	NC	NC	NC	NC
SV010 before	6.00	6.00	NC	NC	NC	*
after	6.00	4.5	NC	NC	NC	0
SV011 before	17.5	17.5	15.0	3.07	90.06	**
after	17.5*	17.5*	11.0*	8.9*	22.37*	8.90
SV012 before	1.7	1.7	1.11	1.87	223.0	***
after	0.50	0.50	1.11	2.67	22.3	***
SV030 before	3.57	3.57	NC	NC	NC	NC
after	5.04	5.04	NC	NC	NC	NC

PM = Particulate Matter

PM<sub>10</sub> = PM smaller than 10 microns

SO<sub>2</sub> = Sulfur Dioxide

NO<sub>x</sub> = Nitrogen Oxides

VOCs = Volatile Organic Compounds

CO = Carbon Monoxide

HAP = Hazardous Air Pollutant

NC = no change

\* The new gluten dryer is subject to lower emission limits for some pollutants, but the existing dryer may still be operated. Thus, hourly emissions shown are the higher of the two dryers.

\*\* VOC-containing vent gases from Mechanical Recompression (MR) units, now vented through SV010, will be routed to the new gluten dryer burner for destruction of VOC, on a trial basis. Testing will be done to determine if this will meet the Consent Decree requirements. VOC emission from the MR units is currently unknown.

\*\*\*Consent Decree requires 95 % reduction of VOC. Test in April 2008 demonstrated better than 99 % destruction.

**Table 2. Total Facility Potential to Emit Summary**

	PM tpy	PM <sub>10</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> tpy	CO tpy	VOC tpy
Total Facility Limited Potential* Emissions	331.0	236.0	1024.2	590.7	756.7	307.5
Total Facility Actual Emissions (2006)	89.9	96.3	473.4	363.3	614.9	323.2

**Table 3. Facility Classification**

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

## 2. Regulatory and/or Statutory Basis

### Compliance Assurance Monitoring

This permit action is a major amendment to a Part 70 permit, and therefore CAM applicability must be considered. Carbon Furnace No. 1 (EU034) will have two new air pollution control devices, a replacement venturi scrubber and a thermal oxidizer. Potential-to-emit considering these new controls is less than 100 tons/year for each criteria pollutant and less than the HAP major source thresholds. Thus, EU034 is not a Large Pollutant Specific Emission Unit (PSEU) as defined in Part 64 and is not subject to CAM in this permit action. (EU034 and many other units have precontrol emissions greater than the major threshold and will be subject to CAM requirements when this Part 70 permit is reissued). The new gluten dryer #2 (EU 127) has post-control emissions less than 100 tons/year and thus is not a Large PSEU.

### New Source Review

The facility is an existing major source under New Source Review (PSD) regulations. Permit conditions established pursuant to the New Source Review (PSD) regulations are identified as "Title I Conditions" in the permit and the tables following.

### Part 70 Permit Program

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

### New Source Performance Standards (NSPS)

The new gluten dryer (EU 123) is subject to Subpart Dc. Because the dryer only burns natural gas, the dryer is subject only to reporting (start of construction and actual startup dates) and recordkeeping requirements (daily fuel use). Boiler No. 3 and Boiler No. 4 are subject to

Subpart Db; liquid storage tanks TK002, TK003, TK005, TK006, and TK015 are subject to Subpart Kb.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

ADM-Marshall ethanol production process unit is a major source of HAP and thus subject to 40 CFR Part 63, Subpart FFFF. The following specific requirements apply:

Fermentation scrubbers – monitoring of scrubbing liquid temperature and specific gravity

Piping connections – leak detection and repair requirements of 40 CFR Part 63, Subpart UU

Minnesota State Rules

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

- Minn. R. 7011.0515 Standards of Performance for New Indirect Heating Equipment
- Minn. R. 7011.0610 Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment
- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment
- Minn. R. 7011.1005 Standards of Performance for Bulk Agricultural Commodity Facilities

**Table 4. Regulatory Overview of Units Affected by the Modification/Permit Amendment**

EU = emission unit, GP = Group, SV = stack/vent

EU, GP, or SV	Applicable Regulations	Comments:
SV007	Title I Condition: 40 CFR 52.21(k)	PM10 limit reduced from 7.94 to 3.0 lb/hr based on performance test
SV010	Title I Condition: 40 CFR 52.21(k)	PM10 limit reduced from 6.0 to 4.5 lb/hr based on performance test
SV011	Title I Condition to avoid classification as a major modification  Limits for TPM, PM10, and SO2 more stringent than existing dryer; limits for CO and NOx less stringent	New gluten dryer EU127; existing dryer may be operated, but not at same time

SV012	<p>Title I Condition: 40 CFR 52.21(k)</p> <p>Title I Condition: BACT, 40 CFR 52.21(j)</p> <p>Title I Condition: BACT, 40 CFR 52.21(j)</p>	<p>NOx limit increased from 1.87 to 2.67 lb/hr due to fuel burned in TO</p> <p>CO limit reduced from 223 to 22.3 lb/hr as required by federal Consent Decree</p> <p>VOC limit set at 1.96 lb/hr as required by federal Consent Decree</p>
SV030	Title I Condition: 40 CFR 52.21(k)	PM10 limit increased from 3.57 to 5.04 lb/hr based on performance test

### 3. Technical Information

A previous permit required remodeling for certain changes. In this case, remodeling was required for PM10. ADM has submitted modeling demonstrating attainment with the NAAQS and MAAQS. This facility is also an increment consumer.

#### 3.1 Periodic Monitoring

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

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

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

The permit includes periodic monitoring requirements, summarized in Table 5, for each subject item in the permit.

**Table 5. Periodic Monitoring**

<b>Emission Unit or Group</b>	<b>Requirement (basis)</b>	<b>Additional Monitoring</b>	<b>Discussion</b>
SV007	PM <sub>10</sub> ≤ 3.0 lb/hr	Compliance has been demonstrated by performance test; periodic performance testing is required in accord with MPCA test frequency policy  Daily observation and record of pressure drop and water flowrate	PM <sub>10</sub> limit reduced
SV010	PM <sub>10</sub> ≤ 4.5 lb/hr	Compliance has been demonstrated by performance test; periodic performance testing is required in accord with MPCA test frequency policy  Daily observation and record of pressure drop and water flowrate	PM <sub>10</sub> limit reduced
SV011	PM <sub>10</sub> ≤ 3.31 lb/hr SO <sub>2</sub> ≤ 8.9 lb/hr NO <sub>x</sub> ≤ 8.9 lb/hr CO ≤ 22.4 lb/hr VOC ≤ 8.9 lb/hr	An initial performance test is required within 90 days of startup of EU127; periodic performance tests will be required based on MPCA test frequency policy;  Daily observation	Emission limits established for the new gluten dryer; the existing dryer may be operated (when the new dryer is not) subject to the same limits as in the previous permit.

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
		and record of pressure drop and water flowrate	
SV012	$\text{NO}_x \leq 2.67$ lb/hr  $\text{CO} \leq 22.3$ lb/hr  $\text{VOC} \leq 1.96$ lb hr	<p>Compliance has been demonstrated by performance test; periodic performance testing is required in accord with MPCA test frequency policy</p> <p>For CO and VOC, continuous record of thermal oxidizer temperature; periodic performance testing is also required in accord with MPCA test frequency policy</p>	Carbon furnace no. 1; Consent Decree requires installation of thermal oxidizer to reduce CO and VOC; NO <sub>x</sub> increases due to thermal oxidizer
SV030	PM10 < 5.04 lb/hr	<p>Compliance has been demonstrated by performance test; periodic performance testing is required in accord with MPCA test frequency policy</p> <p>Daily observation and record of visible emission or pressure drop</p>	PM10 limit increased

### 3.2 Insignificant Activities



Curt Stock (stack testing)  
Toni Volkmeier (peer reviewer)

Attachments: CD-01, calculations