

**AIR EMISSION PERMIT NO. 04900001- 001**

**IS ISSUED TO**

Archer Daniels Midland Company

**ADM - RED WING**

118 Main Street

Red Wing, Goodhue County, MN 55066

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

Permit Type	Application Date
Total Facility Operating Permit	March 13, 1995

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

**Permit Type:** Federal; Part 70/Major for NSR

**Issue Date:** February 28, 2006

**Expiration:** February 28, 2011

All Title I Conditions do not expire.

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Richard J. Sandberg, Manager  
Air Quality Permits Section  
Industrial Division

for Sheryl A. Corrigan  
Commissioner  
Minnesota Pollution Control Agency

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**NOTICE TO THE PERMITTEE:**

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

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

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

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

**PERMIT SHIELD:**

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

**FACILITY DESCRIPTION:**

Archer Daniels Midland Company (ADM) owns and operates an oilseed crushing and vegetable oil refining operation located in Red Wing, Minnesota. The facility consists of emission units related to oilseed receiving, storage, processing, solvent extraction/recovery, meal processing, oil refining, and steam production. The facility receives various raw oilseeds and processes them using hexane to extract vegetable oil. The crude vegetable oil is separated from the hexane and is further refined, stored, loaded and shipped. The extracted material left, after the oil is removed, is processed into meal by desolventizing, drying, and cooling. The meal is stored prior to shipping to customers as animal feed.

The main sources of emissions from the facility are Particulate Matter (PM), Particulate Matter less than 10 microns in size (PM<sub>10</sub>), Volatile Organic Compounds (VOC), Sulfur Dioxide (SO<sub>2</sub>), Carbon Monoxide (CO), Nitrogen Oxides (NO<sub>x</sub>) and Hazardous Air Pollutants (HAPs). PM/PM<sub>10</sub> emissions are emitted from the handling and processing of the seeds, the meal system and the refinery. PM/PM<sub>10</sub>, SO<sub>2</sub>, CO, NO<sub>x</sub> and VOC emissions are emitted from the boilers. Hexane emissions, which are considered both VOC and HAP emissions, are released from the hexane extraction and recovery systems. The facility is a major source under federal New Source Review (NSR), federal Operating Program (40 CFR pt. 70) and federal National Emission Standards for Hazardous Air Pollutants (NESHAPs, 40 CFR pt. 63)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

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Facility Name: ADM - Red Wing  
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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. TOTAL FACILITY OPERATIONAL LIMITATION	hdr
The permittee shall operate in accordance with the facilities Consent Decree requirements.  (This requirement is effective as of December 31, 2007)	Title I Condition: CAAA of 1990; Minn. R. 7007.0800, subp. 2
Volatile Organic Compounds: less than or equal to 90 percent using 12-month Rolling Average (operating months) of the Solvent Loss Factor (SLF) under 40 CFR 63.2840(a)(1). (Volatile Organic Compounds is defined as the VOC Solvent Loss Ratio (SLR) limit in gallons/ton)  (This requirement is effective as of December 31, 2007)  Compliance Ratio $\leq 0.90$ , where: Compliance Ratio = Actual Solvent Loss/Sum[(Crushi)*(SLFi)]; Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months excluding any allowable losses during malfunction periods as defined in Paragraph 74 of the Consent Decree; Crushi = tons of each oilseed type "i" processed during the previous 12 operating months; and SLFi = The corresponding solvent loss factor (gal/ton) for oilseed "i" as listed in Table 1 of 40 CFR 63.2840.  (continued)	Title I Condition: CAAA of 1990; Minn. R. 7007.0800, subp. 2
(continued)  (This requirement is effective as of December 31, 2007)  ADM shall begin to account for solvent loss and quantity of oilseeds processed to comply with the proposed final VOC SLR limit immediately upon proposal of the final SLR limit. The first compliance determination will be based on the first 12 operating months of data collected after the date on which the VOC SLR limit is proposed.	Title I Condition: CAAA of 1990; Minn. R. 7007.0800, subp. 2
B. RECORDKEEPING FOR OPERATIONAL LIMITATION	hdr
Daily Recordkeeping: On each day of operation, the Permittee shall record, and maintain the total hexane usage. This shall be based on throughput logs, meters, and/or delivery records.	Title I Condition: recordkeeping for CAAA of 1990; Minn. R. 7007.0800, subp. 4 and 5
Daily Recordkeeping: On each day of operation, the Permittee shall record, and maintain the total process throughput for each seed type. This shall be based on throughput logs, meters, and/or delivery records.	Title I Condition: recordkeeping for CAAA of 1990; Minn. R. 7007.0800, subp. 4 and 5
Monthly Recordkeeping and Calculation of Production: By the end of each calendar month, following an operating month, for each seed type calculate and record the throughput for the previous month and the 12-month Rolling Sum.  An operating month is any calendar month with at least one normal operating period. It does not include malfunction period. A normal operating period is defined in 40 CFR Section 63.2872.	Title I Condition: recordkeeping for CAAA of 1990; Minn. R. 7007.0800, subp. 4 and 5
Monthly Recordkeeping of Hexane: By the end of each calendar month, following an operating month, calculate and record the hexane usage for the previous month and the 12-month Rolling Sum.	Title I Condition: recordkeeping for CAAA of 1990; Minn. R. 7007.0800, subp. 4 and 5
C. COMPLIANCE DETERMINATION PROCEDURES FOR CONSENT DECREE (signed by U.S. District Court Judge Harold Baker of the Central District of Illinois on August 21, 2003. These requirements are effective as of December 31, 2007)	hdr

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

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<p>SLR LIMIT: Compliance with the VOC SLR limit shall be determined in accordance with 40 CFR Part 63, Subpart GGGG with the following exceptions:                      1) Provisions pertaining to HAP content shall not apply.                      2) Monitoring and recordkeeping of solvent losses shall be conducted daily.                      3) Solvent losses and quantities of oilseed produced during startup and shutdown periods shall not be excluded in determining solvent losses.                      4) Records shall be kept in the form of a table, similar to that provided in the Consent Decree, showing total solvent losses, solvent losses during malfunction periods, adjusted solvent losses minus malfunction losses) monthly and on a twelve-month rolling basis.</p>	<p>Title I Condition: recordkeeping for CAAA of 1990; Minn. R. 7007.0800, subp. 4 and 5</p>
<p>MALFUNCTIONS: ADM may apply the provisions of 40 CFR Part 63, Subpart GGGG pertaining to malfunction periods only when the following two conditions are met:                      1) The malfunction results in total plant shutdown. A "total plant shutdown" means a shutdown of the solvent extraction system.                      2) Cumulative solvent losses during malfunction periods at a plant do not exceed 4,000 gallons in a 12-month period.                      At all other times, ADM must include all solvent losses when determining compliance with its VOC SLR limit.                      During a malfunction period, ADM shall comply with the startup, shutdown and malfunction (SSM) plan as required under Subpart GGGG for the plant. The solvent loss corresponding to a malfunction period will be calculated as the difference in the total solvent inventories for the day before the malfunction period began and the day the plant resumes normal operation.</p>	<p>Title I Condition: recordkeeping for CAAA of 1990; Minn. R. 7007.0800, subp. 4 and 5</p>
<p>D. OPERATIONAL REQUIREMENTS</p>	<p>hdr</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>Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment.</p>	<p>Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)</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>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>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 and maintain air pollution control equipment in proper operating condition and utilize the air pollution control systems as designed. Comply with all other requirements listed in Minn. R. 7011.1005.</p>	<p>Minn. R. 7011.1005</p>
<p>Permittee may not operate or maintain a facility that creates a public nuisance.</p>	<p>Minn. R. 7011.1010</p>
<p>Permittee must comply with the control requirements listed in Minn. R. 7011.1015.</p>	<p>Minn. R. 7011.1015</p>
<p>Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.</p>	<p>Minn. R. 7007.0800, subp. 9(A)</p>
<p>Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.</p>	<p>Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)</p>
<p>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 federally enforceable.</p>	<p>Minn. R. 7030.0010 - 030.0080</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>E. MONITORING REQUIREMENTS</p>	<p>hdr</p>
<p>Visible Emission Monitoring: The permittee shall submit to the MPCA a 30-day notification if the Permittee has to perform a Method 9 test based on periodic visible emission monitoring unless more immediate testing is required by this permit. The Method 9 test shall be conducted a minimum of 1 hour.</p>	<p>Minn. R. 7007.0800, subp. 6</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

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Facility Name: ADM - Red Wing

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Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
<b>F. PERFORMANCE TESTING REQUIREMENTS</b>	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Performance Test Notifications and Submittals: Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements. Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - Microfiche Copy: due 105 days after each Performance Test The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.	Minn. R. 7017.2030, subp. 1-4 and Minn. R. 7017.2035, subp. 1-2
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit.	Minn. R. 7017.2025
Visible emissions training: The permittee shall ensure that one plant employee obtains an initial EPA Method 9 certification or be re-certified every year. This person will train other plant employees to perform the daily visible emissions check.	Minn. R. 7007.0800, subp. 4(D)
<b>G. RECORDKEEPING</b>	hdr
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007.0800, subp. 5(B)
Recordkeeping: Retain all records at the stationary source, or a designated site, for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at the stationary source, or a designated site, include all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Records must conform to the requirements listed in Minn. R. 7007.0800, subp. 5(A).	Minn. R. 7007.0800, subp. 5(C)
<b>H. REPORTING/SUBMITTALS</b>	hdr
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

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Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Emission Inventory Report: due 91 days after end of each calendar year following permit issuance (April 1). To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3010
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 002.0095
Submit: due 180 days after Effective Date of Permit certified and complete facility description forms and information as provided from the MPCA Delta Database.	Minn. R. 7007.0800, subp. 2
<b>I. NESHAP REQUIREMENTS</b>	hdr
The Permittee shall comply with the applicable provisions below based on 40 CFR Section 63, subpart GGGG, Solvent Extraction for Vegetable Oil Production by April 12, 2004, compliance date of the MACT or any alternative date that US EPA approves.	40 CFR Part 63 MACT Subpart GGGG: Solvent Extraction for Vegetable Oil Production
The Permittee shall not "construct" or "reconstruct" a major source of hazardous air pollutants as defined in 40 CFR Section 63.2, without first obtaining a preconstruction permit.	40 CFR Sections 63.40 to 63.44; Minn. R. 7007.3010
<b>J. EMISSION LIMITS FOR NESHAP</b>	hdr
Compliance Ratio: less than or equal to 1.00 for the previous 12 operating months.	40 CFR Section 63.2840 (c)
Compliance Ratio= [f * (Actual Solvent Loss)]/ 0.64*Allowable Solvent Loss]  Where: f = the weighted average volume fraction of HAP in solvent received during the previous 12 operating months, dimensionless. 0.64 = The average volume fraction of HAP in solvent in the baseline performance data, dimensionless. Actual Solvent Loss = Quantity of actual solvent loss during previous 12 operating months (gallons) Allowable Solvent Loss = [the summation of the Quantities of each of the oilseeds processed during the previous 12 operating months (tons) multiplied by their corresponding oilseed solvent loss factors].	40 CFR Section 63.2840
<b>K. GENERAL CALCULATIONS FOR NESHAP and CONSENT DECREE</b>	hdr
Compliance Ratio Calculation: By the end of each calendar month following an operating month, calculate the compliance ratio for the previous 12 operating months.  An operating month is any calendar month with at least one normal operating period. It does not include malfunction period. A normal operating period is defined in 40 CFR Section 63.2872.	40 CFR Section 63.2840

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

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<p>Calculation-Actual Solvent loss: By the end of each calendar month following an operating month, calculate the actual extraction solvent loss during the previous operating month using the following:</p> <p>Monthly Actual Solvent (gal) = summation from i = 1 to n (SOLVb - SOLVe + SOLVr +/- SOLVa)</p> <p>Where:                  SOLVb = Gallons of solvent in the inventory at the beginning of normal operating period "i" as determined in paragraph (a)(3) of this section.                  SOLVe = Gallons of solvent in the inventory at the end of normal operating period "i" as determined in 40 CFR Section 63.2853(a)(3).                  SOLVr = Gallons of solvent received between the beginning and ending inventory dates of normal operating period "i" as determined in 40 CFR 63.2853(a)(4).                  SOLVa = Gallons of solvent added or removed from the extraction solvent inventory during normal operating period "i" as determined in 40 CFR 63.2853(a)(5)                  n = Number of normal operating periods in a calendar month.</p>	<p>40 CFR Section 63.2853</p>
<p>Calculation - 12-month Rolling Sum of actual solvent loss: The owner or operator shall calculate the 12-month rolling sum actual solvent loss by summing the previous 12 operating month solvent losses.</p>	<p>40 CFR Section 63.2853</p>
<p>Calculation - Monthly Weight Average HAP Content: By the end of each calendar month following an operating month, calculate weighted average HAP content (volume fraction). The monthly weighted average HAP content is to be determined using the following equation:</p> <p>Monthly Weighted Average HAP Content of Extraction Solvent (volume fraction) = Summation from i = 1 to n (Receivedi * content)/Total Received</p> <p>Where:                  Receivedi = Gallons of extraction solvent received in delivery "i."                  Contenti = The volume fraction of HAP in extraction solvent delivery "i."                  Total Received = Total gallons of extraction solvent received since the end of the previous operating month.                  n = Number of extraction solvent deliveries since the end of the previous operating month.</p>	<p>40 CFR Section 63.2854</p>
<p>Calculation: 12-month Weighted Average of HAP Content of Solvent Received using the following:                  12-Month Weighted Ave. of HAP Content in Solvent Received (Vol. Frac.) = Summation from i = 1 to 12 (Receivedi * Content)/Total Received</p> <p>Where                  Receivedi = Gallons of extraction solvent received in operating month "i" as determined in 40 CFR Section 63.2853(a)(4).                  Content = Average volume fraction of HAP in extraction solvent received in operating month "i" as determined in 40 CFR Section 63.2854 (b)(1)                  Total Received = Total gallons of extraction solvent received during the previous 12 operating months.</p>	<p>40 CFR Section 63.2854</p>
<p>Calculation - Oilseed Quantity Processed: By the end of each calendar month following an operating month, calculate the monthly quantity of each oilseed processed by using the following equation:</p> <p>Monthly Quantity of Oilseed Processed = Summation from i = 1 to n (SEEDb-SEEDe+SEEDr +/- SEEDa)</p> <p>Where                  SEEDb= Tons of oilseed in the inventory at the beginning of normal operating period "i" as determined in 40 CFR Section 63.2855(a)(3)                  SEEDe = Tons of oilseed in the inventory at the end of normal operating period "i" as determined in accordance with 40 CFR Section 63.2855(a)(3)                  SEEDr = Tons of oilseed received during normal operating period "i" as determined in 40 CFR Section 63.2855(a)(4) of this section.                  SEEDa = Tons of oilseed added or removed from the oilseed inventory during normal operating period "i" as determined in 40 CFR Section 63.2855(a)(5)                  n = Number of normal operating periods in the calendar month during which this type oilseed was processed.</p>	<p>40 CFR Section 63.2855</p>
<p>Calculation - 12-Month Rolling Sum: Calculate the 12-month rolling sum of the oilseed quantity processed by summing the monthly oilseed quantity processed for the previous 12 operating months.</p>	<p>40 CFR Section 63.2855</p>



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

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<p>Calculation - Capacity Weighted Average for the VOC SLR Limit:</p> <p>Compliance Ratio = Actual Solvent Loss/ Summation [(Crushi)*(SLFi)]                  Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months excluding any allowable losses during malfunction periods as defined in paragraph 74 of the Consent Decree.                  Crushi = Tons of each oil seed type "i" processed during the previous 12 operating months.                  SLFi = The corresponding solvent loss factor (gal/ton) for oil seed "i" as listed in Table 1 of 40 CFR Section 63.2840</p>	<p>Title I Condition: CAAA of 1990; Minn. R. 7007.0800, subp. 2</p>
<p>L. RECORDKEEPING REQUIREMENTS FOR NESHAP and CONSENT DECREE</p>	<p>hdr</p>
<p>Plan for Demonstrating Compliance: The owner or operator shall develop and implement a written Plan for demonstrating Compliance. The Plan must include the following :</p> <ol style="list-style-type: none"> <li>1. a detailed description of the method of measurement, measurement frequency, calculations, and quality assurance/quality control plan; recordkeeping, and reporting procedures that will be followed to determine source compliance.</li> </ol>	<p>40 CFR Section 63.2851 (a)</p>
<p>Plan for Startup, Shutdown, and Malfunction (SSM): The owner or operator shall develop and implement a written SSM plan. At a minimum, this plan is to include:</p> <ol style="list-style-type: none"> <li>1. a detailed procedure for operating and maintain the facility to minimize emissions during any SSM event, periods of non-operation associated with a SSM event, and periods of initial startup operation; and</li> <li>2. a specified program of corrective action for malfunctioning process and air pollution control equipment; and 3) specified procedures for estimating solvent loss during each such SSM event.</li> </ol>	<p>40 CFR Section 63.2852</p>
<p>Recordkeeping of Compliance Plans: The owner or operator must maintain the plan for demonstrating compliance and the SSM plan for your facility and keep them on-site and readily available as long as the source is operational.</p>	<p>40 CFR Section 63.2862 (b)</p>
<p>Recording- Solvent Inventory: By the end of each calendar month following an operating month, record the following information for the previous operating month. At a minimum, these records must include:</p> <ol style="list-style-type: none"> <li>1. Dates that define each operating status period during a calendar month;</li> <li>2. The operating status of your source such as normal operation, no operating, malfunction period, or exempt operation for each recorded time interval;</li> <li>3. The gallons of extraction solvent in the inventory on the beginning and ending dates of each normal operating period;</li> <li>4. The gallons f all extraction solvent received, purchased, and recovered during each calendar month;</li> <li>5. All extraction solvent inventory adjustments, additions, or subtractions. You must document the reason for the adjustment and justify the quantity of the adjustment;</li> <li>6. The total solvent loss for each calendar month, regardless of the source operating status, and</li> <li>7. The actual solvent loss in gallons for each operating month.</li> </ol>	<p>40 CFR Section 63.2862 (c)(1)</p>
<p>Recording - Average HAP Content: By the end of each calendar month following an operating month, record the following information for the average HAP content in the extraction solvent, for the previous operating month:</p> <ol style="list-style-type: none"> <li>1. The gallons of extraction solvent received in each delivery;</li> <li>2. The volume fraction of each HAP exceeding 1 percent by volume in each delivery of extraction solvent, and</li> <li>3. The weighted average volume fraction of HAP in extraction solvent received since the end of the last operating month as determined in 40 CFR Section 63.2854 (b)(2).</li> </ol>	<p>40 CFR Section 63.2862 (c)(2)</p>
<p>Recording - Seed Processed Weight: At a minimum record the following:</p> <ol style="list-style-type: none"> <li>1. The dates that define each operating status period. These dates must be the same as the dates entered for the extraction solvent inventory;</li> <li>2. The operating status of your source such as normal operation, no operating, malfunction period, or exempt operating for each recorded time interval. On the log for each type of listed oilseed that is not being processed during a normal operating period, you must record which type of listed oilseed is being processed in addition to the source operating status;</li> <li>3. The oilseed inventory for the type of listed oilseed that is being processed during a normal operating period, you must record which type of listed oilseed is being processed in addition to the source operating status;</li> <li>4. The tons of each type of listed oilseed received at the affected source each normal operating period;</li> </ol>	<p>40 CFR Section 63.2862 (c)(3)</p>
<ol style="list-style-type: none"> <li>5. All listed oilseed inventory adjustments, additions, or subtractions for normal operating periods. You must document the reason for the adjustment and justify the quantity of the adjustment; and</li> <li>6. The tons of each type of listed oilseed processed during each operating month.</li> </ol>	<p>CONTINUED: 40 CFR Section 63.2862 (c)(3)</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

After your source has processed listed oilseed for 12 operating months and you are not operating during an initial start-up as described in 40 CFR Section 63.2850(d)(2), or a malfunction period as described in 40 CFR Section 63.2850(e)(2), you must record the following:	40 CFR Section 63.2862 (d)
(CONTINUED) Recordkeeping of actual solvent: by the end of the calendar month following each operating month, you must record the 12 operating months rolling sum of the actual solvent loss in gallons.	CONTINUED: 40 CFR Section 63.2862 (d)(1)
Recordkeeping of fraction of HAP: by the end of the calendar month following each operating month, you must record weighted average volume fraction of HAP in extraction solvent received for the previous 12 operating months.	40 CFR Section 63.2862 (d)(2)
Recordkeeping of oilseed processed: by the end of the calendar month following each operating month, you must record the 12 operating months rolling sum of each type of listed oilseed processed in tons.	40 CFR Section 63.2862 (d)(3)
Recordkeeping for compliance ratio: By the end of each calendar month following an operating month, you must record the compliance ratio for each 12 month operating period.	40 CFR Section 63.2862 (d)(4)
Recordkeeping of compliance status: By the end of each calendar month following an operating month, you must record a statement of whether the source is in compliance with all of the requirements of subpart GGGG. This includes a determination of whether you have met all of the applicable requirements in 40 CFR Section 63.2850.	40 CFR Section 63.2862 (d)(5)
Recordkeeping of each SSM event: For each SSM event subject to a malfunction period, you must record the following by the end of the calendar month following each month in which a malfunction period occurred: 1. A description and date of the SSM event, its duration, and reason it qualifies as a malfunction; 2. An estimate of the solvent loss in gallons for the duration of the malfunction period with supporting document; and 3. A checklist or other mechanism to indicate whether the SSM plan was followed during the malfunction period.	40 CFR Section 63.2862 (e)
<b>M. REPORTING REQUIREMENTS FOR NESHAP and CONSENT DECREE</b>	hdr
Notification of Deviation Report: The deviation notification report must be submitted for each operating month, in which the compliance ratio exceeds 1.00. The report must be submitted by the end of the month following the calendar month in which the deviation occurred. This report must include the compliance ratio comprising the deviation. (1) The name and address of the owner or operator; (2) The physical address of the vegetable oil production process; (3) Each listed oilseed type processed during the 12 operating months period for which you determined the deviation; and (4) The compliance ratio comprising the deviation. You may reduce the frequency of submittal of the deviation notification report if the agency responsible for these NESHAP does not object as provided in 40 CFR Section 63.10(e)(3)(iii).	40 CFR Section 63.2861(b)
Periodic SSM Report: By the end of the calendar month, submit a periodic startup, shutdown or malfunction (SSM) report for the previous month during which the source has been operated under an initial startup period or a malfunction period. The SSM report must include the following: 1. The name, title, and signature of the source's responsible official who is certifying that the report accurately states that all actions taken during the initial startup or malfunction period were consistent with the SSM plan; 2. A description of events occurring during the time period, the date and duration of the events, and reason the time interval qualifies as an initial startup or malfunction period; 3. An estimate of the solvent loss during the initial startup or malfunction period with supporting documentation.	40 CFR Section 63.2861(c)
Immediate SSM Reports: Within 2 working days after commencing actions inconsistent with the SSM plan, submit an immediate SSM report consisting of a telephone call or facsimile transmission followed by a letter within 7 working days of the event. The SSM report must include the following: 1. The name, title, and signature of the source's responsible official who is certifying the accuracy of the report, an explanation of the event, and the reasons for not following the SSM Plan; 2. A description and date of the SSM event, its duration, and reason it qualifies as a SSM; and 3. An estimate of the solvent loss for the duration of the SSM event with supporting documentation.	40 CFR Section 63.2861(d)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

<p>Records on-site:</p> <p>(a) Your records must be in a form suitable and readily available for review in accordance with 40 CFR Section 63.10(b)(1);</p> <p>(b) As specified in 40 CFR Section 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record; and</p> <p>(c) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, in accordance with 40 CFR Section 63.10(b)(1). You can keep the records off-site for the remaining 3 years.</p>	40 CFR Section 63.2863
N. MODELING REQUIREMENTS	hdr

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: GP 001 99% Fabric Filter Control Equipment**

- Associated Items:** CE 006 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
 CE 007 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
 CE 008 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
 CE 009 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
 CE 014 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

What to do	Why to do it
The requirements of this group apply separately to each item listed under this group.	hdr
A. OPERATIONAL REQUIREMENTS	hdr
The Permittee shall operate and maintain the control equipment any time that the process equipment that it controls is in operation such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 99 percent control efficiency	Minn. R. 7007.0800, subp. 2 and 14; Minn. R. 7011.1005, subp. 1. B
The Permittee shall operate and maintain the control equipment any time that the process equipment that it controls is in operation such that it achieves an overall control efficiency for Particulate Matter < 10 micron: greater than or equal to 99 percent control efficiency	Minn. R. 7007.0800, subp. 2 and 14; Minn. R. 7011.1005, subp. 1. B
The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subp. 2 and 14; Minn. R. 7011.1005, subp. 1. B
Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 8.0 inches of water column , unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the pressure drop once every 24 hours when in operation.  The Permittee shall install instrumentation to measure the pressure drop across the baghouse.	Minn. R. 7007.0800, subp. 2 and 14; Minn. R. 7011.1005, subp. 1. B
Visible Emissions: The Permittee shall check the fabric filter stack for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation.	Minn. R. 7007.0800, subp. 4 and 5
The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
B. MONITORING AND RECORDKEEPING REQUIREMENTS	hdr
Recordkeeping of Visible Emissions and Pressure Drop: The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit	Minn. R. 7007.0800, subp. 4 and 5
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subp. 4, 5 and 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	Minn. R. 7007.0800, subp. 4
Periodic Inspections: At least once per calendar year, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 & 14

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: GP 002 89% Fabric Filter Control Equipment**

- Associated Items:** CE 001 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
 CE 002 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
 CE 003 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
 CE 004 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
 CE 021 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

What to do	Why to do it
The requirements of this group apply separately to each item listed under this group.	hdr
<b>A. OPERATIONAL REQUIREMENTS</b>	hdr
The Permittee shall operate and maintain the control equipment any time that the process equipment that it controls is in operation such that it achieves an overall control efficiency for Total Particulate Matter: greater than or equal to 89 percent control efficiency	Minn. R. 7007.0800, subp. 2 and 14; Minn. R. 7011.1005, subp. 1. B
The Permittee shall operate and maintain the control equipment any time that the process equipment that it controls is in operation such that it achieves an overall control efficiency for Particulate Matter < 10 micron: greater than or equal to 89 percent control efficiency	Minn. R. 7007.0800, subp. 2 and 14; Minn. R. 7011.1005, subp. 1. B
The Permittee shall operate and maintain the fabric filter at all times that any emission unit controlled by the fabric filter is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subp. 2 and 14; Minn. R. 7011.1005, subp. 1. B
Pressure Drop: greater than or equal to 0.5 inches of water column and less than or equal to 8.0 inches of water column , unless a new range is set pursuant to Minn. R. 7017.2025, subp. 3, based on the values recorded during the most recent MPCA approved performance test where compliance was demonstrated. The Permittee shall record the pressure drop once every 24 hours when in operation.  The Permittee shall install instrumentation to measure the pressure drop across the baghouse.	Minn. R. 7007.0800, subp. 2 and 14; Minn. R. 7011.1005, subp. 1. B
Visible Emissions: The Permittee shall check the fabric filter stack for any visible emissions once each day of operation during daylight hours. During inclement weather, the Permittee shall read and record the pressure drop across the fabric filter, once each day of operation.	Minn. R. 7007.0800, subp. 4 and 5
The Permittee shall operate and maintain the fabric filter in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 14
<b>B. MONITORING AND RECORDKEEPING REQUIREMENTS</b>	hdr
Recordkeeping of Visible Emissions and Pressure Drop: The Permittee shall record the time and date of each visible emission inspection and pressure drop reading, and whether or not any visible emissions were observed, and whether or not the observed pressure drop was within the range specified in this permit	Minn. R. 7007.0800, subp. 4 and 5
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; - the recorded pressure drop is outside the required operating range; or - the fabric filter or any of its components are found during the inspections to need repair. Corrective actions shall return the pressure drop to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the fabric filter. The Permittee shall keep a record of the type and date of any corrective action taken for each filter.	Minn. R. 7007.0800, subp. 4, 5 and 14
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording pressure drop as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored fabric filter is in operation.	Minn. R. 7007.0800, subp. 4
Periodic Inspections: At least once per calendar year, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 & 14

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: GP 003 80% Cyclone Control Equipment**

**Associated Items:** CE 005 Centrifugal Collector - Medium Efficiency

CE 010 Centrifugal Collector - Medium Efficiency

CE 013 Centrifugal Collector - Medium Efficiency

CE 015 Centrifugal Collector - Medium Efficiency

What to do	Why to do it
The requirements of this group apply separately to each item listed under this group.	hdr
A. OPERATIONAL REQUIREMENTS	hdr
The Permittee shall operate and maintain the control equipment that it achieves an overall efficiency for Total Particulate Matter: greater than or equal to 80 percent control efficiency	Minn. R. 7007.0800, subp. 2 and 14; Minn. R. 7011.1005, subp. 1. B
The Permittee shall operate and maintain the control equipment that it achieves an overall efficiency for Particulate Matter < 10 micron: greater than or equal to 80 percent control efficiency	Minn. R. 7007.0800, subp. 2 and 14; Minn. R. 7011.1005, subp. 1. B
The Permittee shall operate and maintain the cyclone at all times that any emission unit controlled by the cyclone is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subp. 2 and 14; Minn. R. 7011.1005, subp. 1. B
The Permittee shall operate and maintain the cyclone 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
Visible Emissions: The Permittee shall check the cyclone stack for any visible emissions once each day of operation during daylight hours.	Minn. R. 7007.0800, subp. 4 and 5
B. MONITORING AND RECORDKEEPING REQUIREMENTS	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.	Minn. R. 7007.0800, subp. 4 & 5
Corrective Actions: The Permittee shall take corrective action as soon as possible if any of the following occur: - visible emissions are observed; - the cyclone or any of its components are found during the inspections to need repair. Corrective actions shall return the operation to within the permitted range, eliminate visible emissions, and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the cyclone. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subp. 4, 5 & 14
Periodic Inspections: At least once per calendar year, or more frequently as required by the manufacturing specifications, the Permittee shall inspect the control equipment components. The Permittee shall maintain a written record of these inspections.	Minn. R. 7007.0800, subp. 4, 5 & 14

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item:** SV 001 Truck Receiving Pit 1**Associated Items:** EU 001 Truck Dump Drag Conveyor 1

EU 067 Truck Dump Elevator Leg #1

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Opacity: less than or equal to 5 percent for fugitive emissions from railcar/truck unloading operations and material handling operations.	Minn. R. 7011.1005, subp. 3A
Opacity: less than or equal to 10 percent from control equipment.	Minn. R. 7011.1005, subp. 3D
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The fabric filter (CE001) shall be operated at all times when the emission unit is in operation. See GP002 for fabric filter requirements.	Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item:** SV 002 Truck Receiving Pit 2

**Associated Items:** EU 002 Truck Dump Drag Conveyor 2

EU 068 S-N Drag Conveyor

EU 069 Truck Dump Elevator Leg #2

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Opacity: less than or equal to 5 percent for fugitive emissions from railcar/truck unloading operations and material handling operations.	Minn. R. 7011.1005, subp. 3A
Opacity: less than or equal to 10 percent from control equipment.	Minn. R. 7011.1005, subp. 3D
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The fabric filter (CE002) shall be operated at all times when the emission unit is in operation. See GP002 for fabric filter requirements.	Minn. R. 7007.0800, subp. 2



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: SV 003 Railcar Receiving**

**Associated Items:** EU 003 Rail Pit Belt Conveyor 1

EU 070 Rail Pit Conveyor #2

EU 071 Rail Seed Elevator Leg

EU 072 Driveway Drag

EU 152 N-S Rail Belt Conveyor

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Opacity: less than or equal to 5 percent for fugitive emissions from railcar/truck unloading operations and material handling operations.	Minn. R. 7011.1005, subp. 3A
Opacity: less than or equal to 10 percent from control equipment.	Minn. R. 7011.1005, subp. 3D
Total Particulate Matter: less than or equal to 0.01 grains/dry standard cubic foot	Title I Condition: Limit taken to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The fabric filter (CE003) shall be operated at all times when the emission unit is in operation. See GP002 for fabric filter requirements.	Title I Condition: Limit taken to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
SPECIFIC PERFORMANCE TESTING	hdr
Performance Test: due 180 days after achieving maximum capacity, but no later than 550 days after Permit Issuance, to verify PM emissions, PM10 emission factors, opacity and develop emission factors to verify and update emission calculations.	Minn. R. 7017.2020, subp. 1 and 40 CFR 60.8(a)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing  
 Permit Number: 04900001 - 001

**Subject Item: SV 004 Process Elevator 1a & 1b**

- Associated Items:** EU 008 Screw Conveyor to Tank 1000 #1  
 EU 073 Screw Conveyor to Tank 1000 #2  
 EU 074 Tank 1000 Discharge Drag Conveyor  
 EU 075 Drag Conveyor to Turnhead  
 EU 076 Seed Cleaner  
 EU 077 Bin #108 Feeder  
 EU 086 Seed Cleaner  
 EU 146 Rail Elevator Leg-150'  
 EU 147 Reversing Screw Conveyor  
 EU 149 Seed Hi-Roller to Inside Elevator Leg  
 EU 150 Inside Silo Elevator Leg  
 EU 155 Dryer Feed Screw Conveyor  
 EU 156 Dryer Discharge Elevator Leg  
 EU 157 Bridge Drag Conveyor  
 EU 158 Seed Day Bin

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Opacity: less than or equal to 5 percent for fugitive emissions from railcar/truck unloading operations and material handling operations.	Minn. R. 7011.1005, subp. 3A
Opacity: less than or equal to 10 percent from control equipment.	Minn. R. 7011.1005, subp. 3D
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The fabric filter (CE006) shall be operated at all times when the emission unit is in operation. See GP001 for fabric filter requirements.	Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: SV 005 Old Flour Mill**

- Associated Items:** EU 011 Elevator Leg  
 EU 078 160' Leg at Flour Mill Elevator  
 EU 079 Drag Conveyor to Seed Bins  
 EU 080 Drag Conveyor from Bins  
 EU 081 Screw N-S to Tanks 151 and 152  
 EU 082 Screw From Tank 151 to 152  
 EU 083 151 and 152 Discharge Screw W-E  
 EU 084 Screw from Tank 151 to Truck Dump Leg  
 EU 085 Screw Under Bins 1-6 Flour Mill Elevator  
 EU 135 Incline Screw to Tanks 151and 152  
 EU 151 Screw Conveyor to Bins 1-6

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Opacity: less than or equal to 5 percent for fugitive emissions from railcar/truck unloading operations and material handling operations.	Minn. R. 7011.1005, subp. 3A
Opacity: less than or equal to 10 percent from control equipment.	Minn. R. 7011.1005, subp. 3D
Total Particulate Matter: less than or equal to 0.033 grains/dry standard cubic foot	Title I Condition: Limit taken to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The fabric filter (CE009) shall be operated at all times when the emission unit is in operation. See GP001 for fabric filter requirements.	Title I Condition: Limit taken to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
SPECIFIC PERFORMANCE TESTING	hdr
Performance Test: due 180 days after achieving maximum capacity, but no later than 550 days after Permit Issuance, to verify PM emissions, PM10 emission factors, opacity and develop emission factors to verify and update emission calculations.	Minn. R. 7017.2020, subp. 1 and 40 CFR 60.8(a)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: SV 007 Grain/Seed Dryer****Associated Items:** EU 019 Column Dryer with Screen Airs

<b>What to do</b>	<b>Why to do it</b>
A. OPERATIONAL LIMITS	hdr
The perforations of the column dryer screen must not exceed 3/32 inches in diameter; and the emissions from a rack dryer must pass through a 50-mesh screen enclosure before discharge to the atmosphere.	Minn. R. 7011.1005, subp. 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: SV 008 Expeller/Conditioner**

- Associated Items:**
- EU 023 K1 Expeller
  - EU 087 Drag Conveyor to Conditioners
  - EU 088 Screw Conveyor to Conditioners
  - EU 089 Conditioner #2
  - EU 090 Runaround Bulk -Flow to Expellers
  - EU 091 K2 Expeller
  - EU 092 #1 Expeller
  - EU 093 #2 Expeller
  - EU 094 #3 Expeller
  - EU 095 #4 Expeller
  - EU 096 #5 Expeller
  - EU 097 #6 Expeller
  - EU 098 #7 Expeller
  - EU 099 #8 Expeller
  - EU 100 Rerun Seed Elevator Leg
  - EU 101 Rerun Screw Conveyor to Day Bin
  - EU 102 Cake Drag Conveyor 1-8
  - EU 103 Cake Drag Cross Conveyor
  - EU 104 Cake Bulk-Flow
  - EU 105 Cake Hammermill
  - EU 106 6" Screw Meal to Runaround Conveyor #1
  - EU 107 6" Screw Meal to Runaround Conveyor #2
  - EU 176 Conditioner #1

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The control equipment (CE010) shall be operated at all times when the emission unit is in operation. See GP003 for control equipment requirements.	Minn. R. 7007.0800, subp. 2
SPECIFIC PERFORMANCE TESTING	hdr
Performance Test: due 180 days after achieving maximum capacity, but no later than 550 days after Permit Issuance, to verify PM emissions, PM10 emission factors, opacity and develop emission factors to verify and update emission calculations.	Minn. R. 7017.2020, subp. 1 and 40 CFR 60.8(a)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: SV 009 Flaking Rolls**

- Associated Items:** EU 025 #1 Flaker  
 EU 108 #2 Flaker  
 EU 109 #3 Flaker  
 EU 110 #4 Flaker  
 EU 111 #5 Flaker  
 EU 112 #6 Flaker  
 EU 113 Flake Overflow Bulk-Flow  
 EU 114 Flake Bulk-Flow Feed Screw Conveyor  
 EU 115 Flake Bulk-Flow  
 EU 116 Flake Cross Screw Conveyor  
 EU 117 Long Rotex Discharge Screw Conveyor  
 EU 118 Basement Cake Screw Conveyor  
 EU 159 Flaker Feed Conveyor  
 EU 160 Flaker Collect Conveyor

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.0285 grains/dry standard cubic foot	Title I Condition: Limit taken to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The control equipment (CE005) shall be operated at all times when the emission unit is in operation. See GP003 for control equipment requirements.	Title I Condition: Limit taken to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
SPECIFIC PERFORMANCE TESTING	hdr
Performance Test: due 180 days after achieving maximum capacity, but no later than 550 days after Permit Issuance, to verify PM emissions, PM10 emission factors, opacity and develop emission factors to verify and update emission calculations.	Minn. R. 7017.2020, subp. 1 and 40 CFR 60.8(a)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: SV 011 Extractor/DTDC (Desolventizer Toaster) Hexane Tanks****Associated Items:** EU 033 DTDC

EU 065 Extractor

<b>What to do</b>	<b>Why to do it</b>
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. OPERATIONAL REQUIREMENTS	hdr
The Cold Water Condenser plus Mineral Oil Absorption System (CE 028) shall be operated at all times when the emission units are in operation.	Title I Condition: CAAA of 1990; Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: SV 012 DTDC (Dryers/Coolers)****Associated Items: EU 033 DTDC**

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The control equipment (CE013) shall be operated at all times when the emission unit is in operation. See GP003 for control equipment requirements.	Minn. R. 7007.0800, subp. 2



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: SV 013 Meal Grinding**

- Associated Items:** EU 034 Meal Incline Drag Conveyor from Ext.  
 EU 038 Outside Meal Bins/Harvestore  
 EU 043 S-N Tramco Drag to Barge Loading  
 EU 119 Horizontal Meal Drag Conveyor  
 EU 120 Sifter Feed Screw Conveyor  
 EU 121 Static Sifter #1  
 EU 122 Static Sifter #2  
 EU 123 Meal Grinder #1  
 EU 124 Meal Grinder #2  
 EU 125 Harvestore Feed Conveyor  
 EU 126 Meal Screw On Top of Inside Meal Bins  
 EU 127 Meal Screw from 24" Rev. Screw to East  
 EU 128 L-Path by EXT for Spilled Meal  
 EU 129 Meal Hi-Roller East-West  
 EU 130 24" Reversing Screw E-W or W-E  
 EU 131 S-N 24" Screw Conveyor to River  
 EU 161 Final Meal Elevator Leg  
 EU 162 Hammermill Discharge Drag Conveyor  
 EU 164 Elevator Leg to Harvestore  
 EU 165 Drag Conveyor to Inside Bins

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The control equipment (CE014) shall be operated at all times when the emission unit is in operation. See GP001 for control equipment requirements.	Minn. R. 7007.0800, subp. 2
SPECIFIC PERFORMANCE TESTING	hdr
Performance Test: due 180 days after achieving maximum capacity, but no later than 550 days after Permit Issuance, to verify PM emissions, PM10 emission factors, opacity and develop emission factors to verify and update emission calculations.	Minn. R. 7017.2020, subp. 1 and 40 CFR 60.8(a)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: SV 014 Pellet Cooler**

**Associated Items:** EU 041 Pellet Cooler

EU 132 Pellet Mill 600 HP

EU 133 Pellet Mill E 250 HP

EU 134 Pellet Mill W 250 HP

EU 136 Cross Screw to Pellet Leg 1st Floor

EU 163 Pellet Elevator Leg

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The control equipment (CE014) shall be operated at all times when the emission unit is in operation. See GP001 for control equipment requirements.	Minn. R. 7007.0800, subp. 2
SPECIFIC PERFORMANCE TESTING	hdr
Performance Test: due 180 days after achieving maximum capacity, but no later than 550 days after Permit Issuance, to verify PM emissions, PM10 emission factors, opacity and develop emission factors to verify and update emission calculations.	Minn. R. 7017.2020, subp. 1 and 40 CFR 60.8(a)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: SV 015 River Bin Tank 17**

<b>What to do</b>	<b>Why to do it</b>
<b>A. POLLUTANT LIMITS</b>	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
<b>B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS</b>	hdr
The control equipment (CE007) shall be operated at all times when the emission unit is in operation. See GP001 for control equipment requirements.	Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: SV 016 River Bin Tank 18**

<b>What to do</b>	<b>Why to do it</b>
<b>A. POLLUTANT LIMITS</b>	hdr
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
<b>B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS</b>	hdr
The control equipment (CE008) shall be operated at all times when the emission unit is in operation. See GP001 for control equipment requirements.	Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: SV 017 Rail/Barge Loadout/Barge Receiving**

- Associated Items:** EU 005 Park Track Bulk Flow  
 EU 042 River Bin Elevator Leg  
 EU 044 River Bin Feed Drag Conveyor(Tank 17)  
 EU 137 Drag Conveyor to River Bins  
 EU 138 Rail Cross Conveyor  
 EU 139 Rail Pit Discharge Conveyor  
 EU 166 L-Path Conveyor Under Bins  
 EU 167 Drag Conveyor to Rail  
 EU 169 Traveling Enclosed Belt Conveyor

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Opacity: less than or equal to 5 percent for fugitive emissions from a truck unloading station, railcar unloading station, railcar loading station, or handling operation;	Minn. R. 7011.1005, subp. 3A
Opacity: less than or equal to 10 percent opacity for discharge of fugitive emissions from a truck loading station	Minn. R. 7011.1005, subp. 3B
Opacity: less than or equal to 20 percent opacity for fugitive emissions from a ship or barge loading or unloading station, except that during trimming or topping-off, when normal loading procedures cannot be used, no opacity standard applies.	Minn. R. 7011.1005, subp. 3C
Opacity: less than or equal to 10 percent from control equipment.	Minn. R. 7011.1005, subp. 3D
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The control equipment (CE021) shall be operated at all times when the emission unit is in operation. See GP002 for control equipment requirements.	Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: SV 018 Truck Loadout**

**Associated Items:** EU 140 Under Bins Conveyor to Loadout  
 EU 141 Tramco Drag Under Inside Meal Bins  
 EU 142 Goliath Underloader  
 EU 143 Harvestore Discharge Conveyor  
 EU 144 Harvestore Discharge Inclined Conveyor  
 EU 145 Harvestore Discharge Elevator Leg  
 EU 168 Truck Meal Loadout Drag Conveyor

What to do	Why to do it
A. POLLUTANT LIMITS	hdr
Opacity: less than or equal to 10 percent opacity for discharge of fugitive emissions from a truck loading station	Minn. R. 7011.1005, subp. 3B
Opacity: less than or equal to 10 percent from control equipment.	Minn. R. 7011.1005, subp. 3D
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	hdr
The control equipment (CE004) shall be operated at all times when the emission unit is in operation. See GP002 for control equipment requirements.	Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: EU 059 Boiler #1**

**Associated Items: SV 023 Boiler 1**

What to do	Why to do it
A. OPERATIONAL LIMITATION	hdr
Total Particulate Matter: less than or equal to 0.6 lbs/million Btu heat input using 3-hour Rolling Average <0.15 lbs/million BTU heat input for PTE calculations>	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0510, subp. 2
The Permittee shall comply with the requirements of 40 CFR pt. 63, subp. DDDDD.	40 CFR pt. 63, subp. DDDDD National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
B. OTHER LIMITS AND REQUIREMENTS	hdr
Sulfur Content of Fuel: less than or equal to 2.0 percent by weight of fuel oil.	Minn. R. 7007.0800, subp. 2
Fuel Type: Natural gas and Fuel oil only.	Minn. R. 7007.0800, subp. 2
Visible Emissions: The Permittee shall check the associated stack for visible emissions during daylight hours, while burning fuel oil.	Minn. R. 7007.0800, subp. 4
Capacity: less than or equal to 88 million Btu's/hour	Minn. R. 7007.0800, subp. 2
C. RECORDKEEPING FOR OPERATIONAL LIMITATION	hdr
Daily Recordkeeping: On each day of operation, the Permittee shall record and maintain the type of fuel burned.	Minn. R. 7007.0800, subps. 4 & 5
Monthly Recordkeeping -- Fuel Use. By the end of each calendar month, the Permittee shall calculate and record the following: 1) The total fuel use for the previous calendar month using the daily usage records. 2) The type of fuel used for the previous calendar month using the daily usage records. 3) The 12-month rolling sum total fuel use for the previous 12-month period by summing the monthly total fuel use data for the previous 12 months.	Minn. R. 7007.0800, subps. 4 & 5
Recordkeeping of Visible Emissions (VE): The Permittee shall keep records on the time and date of VE inspection, whether or not any VEs were observed.	Minn. R. 7007.0800, subps. 4 & 5
Recordkeeping of Corrective Actions (VE): The Permittee shall record the corrective actions taken, as soon as possible as based on the operation and maintenance plan to eliminate any visible emissions.	Minn. R. 7007.0800, subps. 4 & 5
Fuel Supplier Certification: The Permittee shall retain written documentation of each shipment of fuel oil recieved. The written documentation shall include the following information: the sulfur content of the fuel, the method used to determine the sulfur content and certification that the sulfur content is less than or equal to 2.0% by weight.	Minn. R. 7007.0800, subps. 4 & 5
SPECIFIC PERFORMANCE TESTING	hdr
Performance Test: due 180 days after achieving maximum capacity, but no later than 550 days after Permit Issuance, to verify PM emissions, PM10 emission factors, opacity and develop emission factors to verify and update emission calculations.	Minn. R. 7017.2020, subp. 1 and 40 CFR 60.8(a)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: EU 066 Boiler #2**

**Associated Items: SV 022 Boiler 2**

What to do	Why to do it
A. OPERATIONAL LIMITATION	hdr
Total Particulate Matter: less than or equal to 0.6 lbs/million Btu heat input using 3-hour Rolling Average <0.15 lbs/million BTU heat input for PTE calculations>	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0510, subp. 2
The Permittee shall comply with the requirements of 40 CFR pt. 63, subp. DDDDD.	40 CFR pt. 63, subp. DDDDD National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
B. OTHER LIMITS AND REQUIREMENTS	hdr
Fuel Type: Natural gas.	Minn. R. 7007.0800, subp. 2
Capacity: less than or equal to 65 million Btu's/hour	Minn. R. 7007.0800, subp. 2
C. RECORDKEEPING FOR OPERATIONAL LIMITATION	hdr
<p>Monthly Recordkeeping -- Fuel Use.</p> <p>By the end of each calendar month, the Permittee shall calculate and record the following:</p> <ol style="list-style-type: none"> <li>1) The total fuel use for the previous calendar month using the daily usage records.</li> <li>2) The type of fuel used for the previous calendar month using the daily usage records.</li> <li>3) The 12-month rolling sum total fuel use for the previous 12-month period by summing the monthly total fuel use data for the previous 12 months.</li> </ol>	Minn. R. 7007.0800, subps. 4 & 5



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

**Subject Item: CE 028 MO Absorber - Cold H2O Cond**

**Associated Items:** EU 033 DTDC

EU 065 Extractor

TK 001 Commercial Grade Hexane

TK 002 Commercial Grade Hexane

What to do	Why to do it
CE 028 is defined as the Mineral Oil Absorption System (inclusive of the cold water condenser)	hdr
A. OPERATIONAL REQUIREMENTS	hdr
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Volatile Organic Compounds: greater than or equal to 95 percent control efficiency	Minn. R. 7007.0800, subp. 2
The Permittee shall operate and maintain the control equipment such that it achieves an overall control efficiency for Hexane: greater than or equal to 95 percent control efficiency	Minn. R. 7007.0800, subp. 2
The Permittee shall operate and maintain the control device at all times that any emission unit controlled by the control device is in operation. The Permittee shall document periods of non-operation of the control equipment.	Minn. R. 7007.0800, subp. 2
Cold mineral oil entering the control equipment must be maintained at a Temperature: less than or equal to 120 degrees F	Minn. R. 7007.0800, subp. 2
Mineral Oil flow rate must be maintained at a Liquid Flow Rate: greater than or equal to 20 gallons/minute	Minn. R. 7007.0800, subp. 2
Cold Water Condenser outlet gas must be maintained at a Temperature: less than or equal to 105 degrees F	Minn. R. 7007.0800, subp. 2
The Permittee shall operate and maintain the equipment in accordance with the Operation and Maintenance (O & M) Plan to achieve optimal control efficiencies. The Permittee shall keep copies of the O & M Plan available onsite for use by staff and MPCA staff.	Minn. R. 7007.0800, subp. 2
B. MONITORING AND RECORDKEEPING REQUIREMENTS	hdr
Monitoring Equipment: The Permittee shall install and maintain the necessary monitoring equipment for measuring and recording the temperature and flow rate, as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when the monitored equipment is in operation.	Minn. R. 7007.0800, subp. 4 & 5
The Permittee shall maintain and operate a thermocouple monitoring device that continuously indicates and records the cold oil mineral oil temperature entering the mineral oil scrubber and the cold water condenser outlet gas.	Minn. R. 7007.0800, subp. 4 & 5
Monitoring: The Permittee shall physically check the temperature recording devices at least once each operating shift 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 & 5
Monitoring: The Permittee shall record the operating parameters once each operating shift. The record shall include the time and date of the reading and whether or not it was within the range specified by this permit.	Minn. R. 7007.0800, subp. 4 & 5
Corrective Actions: If the temperature is above the maximum, or the operating parameters are outside the specified ranges, or if the control equipment 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, flowrates, and/or operating parameters to the specified limits/ranges 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 control equipment. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subp. 4, 5, & 14
Inspections: At least once per calendar year, or more frequently if required by the manufacturer specifications, the Permittee shall inspect the control equipment system components. 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, & 14
Annual Calibration: The Permittee shall calibrate the temperature monitor and flow rate gauges at least annually and shall maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subp. 4, 5, & 14

**TABLE B: SUBMITTALS**

02/28/06

Facility Name: ADM - Red Wing  
Permit Number: 04900001 - 001

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

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

Send any application for a permit or permit amendment to:

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

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

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

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

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

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

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

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

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

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

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Computer Dispersion Modeling Protocol	due 1,096 days after Permit Issuance. Submit modeling data as specified in MPCA guidance for Modeling Information Requests (for PM10, SO2 and NOx). This modeling information is for data collection purposes, no modeling analysis is required at this time. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Total Facility
Fugitive Control Plan	due 60 days after Permit Issuance to the Commissioner for review and approval. The Permittee shall follow the actions and recordkeeping specified. The plan may be amended by the Permittee with the Commissioner's approval. If the Commissioner determines the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive control plan, then the Permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors as requested by the Commissioner.	Total Facility
Testing Frequency Plan	due 60 days after Performance Test. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	EU059, SV003, SV005, SV008, SV009
Testing Frequency Plan	due 60 days after Performance Test. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	SV013
Testing Frequency Plan	due 60 days after Performance Test. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	SV014

**TABLE B: RECURRENT SUBMITTALS**

02/28/06

Facility Name: ADM - Red Wing

Permit Number: 04900001 - 001

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance. The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 30 days after end of each calendar year following Permit Issuance (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. The report covers all deviations experienced during the calendar year.	Total Facility
Compliance Certification	due before end of each year starting 06/20/2005 (CONTINUED) (year is defined as 12 calendar months) (5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source; and (6) A compliance certification to indicate whether the source was in compliance for each compliance determination made during the 12 calendar months period covered by the report. For each such compliance determination, you must include a certification of the following: (i) You are following the procedures described in the plan for demonstrating compliance and (ii) The compliance ratio is less than or equal to 1.00.	Total Facility
Compliance Certification	due before end of each year starting 06/20/2005 (year is defined as 12 calendar months) Each subsequent annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. Include the following information in the compliance certification: (1) The name and address of the owner or operator; (2) The physical address of the vegetable oil production process; (3) Each listed oilseed type processed during the 12 calendar months period covered by the report; (4) Each HAP identified under 40 CFR Section 63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 calendar months period covered by the report; and (continued)	Total Facility

APPENDIX MATERIAL

Facility Name:ADM - Red Wing

Permit Number: 04900001-001

**Insignificant Emission Units and Applicable Requirements**

<b>Minn. R. 7007.1300, subpart</b>	<b>Description of the Activity</b>	<b>Applicable Requirement</b>
3(A)	Natural gas space heaters	Minn. R. 7011.0510
3(B)(2)	One 216,000 Btu/hr natural gas unit that provides steam heat for the scale house.	Minn. R. 7011.0510
3(G)	One small material testing laboratory.	Minn. R. 7007.1300
3(H)(1)	Kerosene parts cleaner degreasing unit	Minn. R. 7011.0710/0715
3(H)(4)	Brazing, soldering, or welding equipment	Minn. R. 7011.0735
3(I)	Hotsy high pressure water heater	Minn. R. 7011.0510
3(I)	Therminal heater	Minn. R. 7011.0510
4(B)	Conveyor to Extractor	Minn. R. 7011.0735
4(B)	Diatomaceous Earth Receiving/Day Bin	Minn. R. 7011.0735
4(B)	Bleaching Clay Receiving/Day Bin	Minn. R. 7011.0735
4(B)	Dewax Slurry Tank	Minn. R. 7011.0735
4(B)	Diesel Generator	Minn. R. 7011.0515
4(B)	Grain/Seed Storage	Minn. R. 7011.0735
4(B)	Meal Storage	Minn. R. 7011.0735

**TECHNICAL SUPPORT DOCUMENT**  
**For**  
**AIR EMISSION PERMIT NO. 04900001-001**

This Technical Support Document (TSD) 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: 2076)
Archer Daniels Midland (ADM) 4666 Faries Parkway Decatur IL. 62526	Archer Daniels Midland Red Wing Oilseed Processing Facility 126 La Grange Red Wing, MN 55066 Goodhue County
Contact: Dave Turner Phone: (651) 388-7111	

**1.2. Description of the Permit Action**

This permit action is for a Part 70 Total Facility Operating Permit and is a consolidation of existing applicable conditions from previous permitting actions and incorporates the Consent Decree signed by U.S. District Court Judge Harold Baker of the Central District of Illinois on August 21, 2003. This permit will incorporate amendments and more detailed specifications of the emission units, pollution control equipment, new rules and existing regulations that apply to the facility.

The permit applications for issuance of this Part 70 Total Facility Permit was submitted, and received by the Minnesota Pollution Control Agency (MPCA) in accordance with the 1995 deadline. ADM has continued to update these applications throughout the completion of this permit.

**1.3 Stationary Source Description**

ADM owns and operates an oilseed crushing and vegetable oil refining operation located in Red Wing, Minnesota. The facility consists of emission units related to oilseed receiving, storage, processing, solvent extraction/recovery, meal processing, oil refining, and steam production. The facility receives various raw oilseeds and processes them using hexane to extract vegetable oil. The crude vegetable oil is separated from the hexane and is further refined, stored, loaded and shipped. The extracted material left, after the oil is removed, is processed into meal by desolventizing, drying, and cooling. The meal is stored prior to shipping to customers as animal feed.

The main sources of emissions from the facility are Particulate Matter (PM), Particulate Matter less than 10 microns in size (PM<sub>10</sub>), Volatile Organic Compounds (VOC), Sulfur Dioxide (SO<sub>2</sub>), Carbon Monoxide (CO), Nitrogen Oxides (NO<sub>x</sub>) and Hazardous Air Pollutants (HAPs). PM/PM<sub>10</sub> emissions are emitted from the handling and processing of the seeds, the meal system and the refinery. PM/PM<sub>10</sub>, SO<sub>2</sub>, CO, NO<sub>x</sub> and VOC emissions are emitted from the boilers. Hexane emissions, which are considered both VOC and HAP emissions, are released from the hexane extraction and recovery systems. The facility is a major source under federal New Source Review (NSR), federal Operating Program (40 CFR pt. 70) and federal National Emission Standards for Hazardous Air Pollutants (NESHAPs, 40 CFR pt. 63).

**1.4 Description of All Amendments Issued Since the Issuance of the Last Total Facility Permit to be Included in the Part 70 Permit**

<b>Permit Number and Issuance Date</b>	<b>Action Authorized</b>
175F-86-OT-1 Received April 13, 2005	Replacement of corroded existing stack with a newly constructed stack and switch the boiler emission units associated with two stack vents.
*ADM Letter Head dated March 12, 2004	Installation of a once through cold-water condenser.
*ADM Letter Head dated September 5, 2003	Replacement of control equipment with equipment having equivalent or better control efficiencies.
175F-86-OT-1 Received February 05, 2002	Installation of standby generator.
175F-86-OT-1 Received September 25, 2000	Removal of two standby coal boilers and replaced by one natural gas package boiler.
*ADM Letter Head dated March 2, 1999	Installation of control equipment in the meal loadout area.
0490000-005 MPCA Letter Head dated January 27, 1999	Baghouse replacement and replacement of raw material conveyors.
Notification Received June 3, 1996	Replacement of control equipment with equipment having equivalent or better control efficiencies.
Notification Received February 28, 1996	Replacement of control equipment with equipment having equivalent or better control efficiencies.
175F-86-OT-1 February 16, 1989	Amendment 2: Removed restricted hours of operation for the Expanded Material Cooling equipment in exchange for a 0.028 grains/scf limit.
175F-86-OT-1 October 04, 1988	Amendment 1: Expanded Material Cooling to their Operation for Crushing Sunflower Seeds and Flax for Oil and Meal.
175F-86-OT-1 May 30, 1986	Operating Permit: Oil Processing Plant

\* Information is as provided by ADM and is not currently in MPCA files.

**1.5. Facility Emissions:**

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

	PM tpy	PM <sub>10</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> tpy	VOC tpy	CO tpy	Lead tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions	202.5	105.6	807.0	169.2	1082.5	55.2	0.00	690.5	690.5
Total Facility Actual Emissions (2004)	123.53	70.21	121.27	44.34	252.15	5.43	0.00	HAPs not reported in emission inventory	

**Table 2: Facility Classification**

Classification	Major/Affected Source	Synthetic Minor	Minor
Prevention of Significant Deterioration (PSD)	PM, SO <sub>2</sub> , CO, NO <sub>x</sub> , VOC		Lead
Part 70 Permit Program	PM, PM <sub>10</sub> , SO <sub>2</sub> , CO, VOC(Ozone), HAP		Lead
Part 63 NESHAP	HAP		

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

**New Source Review**

The facility is an existing major source under New Source Review regulations. No changes are authorized by this permit.

**Part 70 Permit Program**

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

**Consent Decree**

The facility is subject to a consent decree signed by U.S. District Court Judge Harold Baker of the Central District of Illinois on August 21, 2003.

**New Source Performance Standards (NSPS)**

There are no New Source Performance Standards applicable to the operations at this facility.

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

The facility is subject to Solvent Extraction for Vegetable Oil Production, NESHAP, Subp GGGG.



**Minnesota State Rules**

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

- Minn. R. 7011.0020 Circumvention
- Minn. R. 7011.0150 Standards of Performance for control of fugitive Particulate Matter
- Minn. R. 7011.0510 Standards of Performance for Existing Indirect Heating Equipment
- Minn. R. 7011.0715 Standards of Performance for Post-1969 Industrial Process Equipment
- Minn. R. 7011.1005 Standards of performance for dry bulk agricultural commodity facilities.
- Minn. R. 7011.1010 Nuisance
- Minn R. 7011.1015 Control Requirements Schedule

**Table 3. Regulatory Overview of Facility**

EU, GP, or SV	Applicable Regulations	Comments:
<b>Total Facility (TF)</b>	a) 40 CFR pt. 63, subp. GGGG  b) CAAA of 1990 40 CFR § 52.21 Minn. R. 7007.0800	a) National Emission Standards for Hazardous Air Pollutants for Solvents Extraction for Vegetable Oil Production.  This standard regulates HAP emissions from facilities that are major sources. The rule restricts plant-wide hexane emissions from each affected facility rather than requiring individual controls at each emission point.  b) VOC Solvent Loss Ratio (SLR) limit of less than or equal to 90 percent of the Solvent Loss Factor on a 12-month Rolling Average complies with Consent Decree requirements.
<b>GP 001 through GP 004</b>	a) Minn. R. 7007.0800  b) Minn. R. 7011.1005	a) Control efficiency limits and operational requirements. Monitoring and recordkeeping requirements ensure proper operation.  b) Standards of performance requirement for dry bulk agricultural commodity facilities.

<p><b>SV 001</b> <b>SV 002</b></p>	<p>a) Minn. R. 7011.1005</p> <p>b) Minn. R. 7011.0715</p> <p>c) Minn. R. 7007.0800</p>	<p>a) Standards of performance requirement for dry bulk agricultural commodity facilities.</p> <p>b) Standards of performance limits for particulate matter for industrial equipment.</p> <p>c) Pollution control requirements.</p>
<p><b>SV 003</b></p>	<p>a) Minn. R. 7011.1005</p> <p>b) 40 CFR § 52.21 Minn. R. 7007.0800 Minn. R. 7007.3000</p> <p>c) 40 CFR § 52.21 Minn. R. 7007.0800 Minn. R. 7007.3000</p> <p>d) Minn. R. 7017.2020 40 CFR § 60.8(a)</p>	<p>a) Standards of performance requirement for dry bulk agricultural commodity facilities.</p> <p>b) Stack vent limit, from a previous permitting action, taken to keep an emissions increase to less than significant as defined in 40 CFR § 52.21.</p> <p>c) Pollution control requirements, from a previous permitting action, to keep an emissions increase to less than significant as defined in 40 CFR § 52.21.</p> <p>d) Testing requirements to ensure and verify compliance.</p>
<p><b>SV 004</b></p>	<p>a) Minn. R. 7011.1005</p> <p>b) Minn. R. 7007.0800</p>	<p>a) Standards of performance requirement for dry bulk agricultural commodity facilities.</p> <p>b) Pollution control requirements.</p>
<p><b>SV 005</b></p>	<p>a) Minn. R. 7011.1005</p> <p>b) 40 CFR § 52.21 Minn. R. 7007.0800 Minn. R. 7007.3000</p> <p>c) 40 CFR § 52.21 Minn. R. 7007.0800 Minn. R. 7007.3000</p> <p>d) Minn. R. 7017.2020 40 CFR § 60.8(a)</p>	<p>a) Standards of performance requirement for dry bulk agricultural commodity facilities.</p> <p>b) Stack vent limit, from a previous permitting action, taken to keep an emissions increase to less than significant as defined in 40 CFR § 52.21.</p> <p>c) Pollution control requirements, from a previous permitting action, to keep an emissions increase to less than significant as defined in 40 CFR § 52.21.</p> <p>d) Testing requirements to ensure and verify compliance.</p>

<b>SV 007</b>	Minn. R. 7011.1005	a) Standards of performance requirement for dry bulk agricultural commodity facilities.
<b>SV 008</b>	a) Minn. R. 7011.0715 b) Minn. R. 7007.0800 c) Minn. R. 7017.2020 40 CFR § 60.8(a)	a) Standards of performance limits for particulate matter for industrial equipment. b) Pollution control requirements. c) Testing requirements to ensure and verify compliance.
<b>SV 009</b>	a) Minn. R. 7011.0715 b) 40 CFR § 52.21 Minn. R. 7007.0800 Minn. R. 7007.3000 c) 40 CFR § 52.21 Minn. R. 7007.0800 Minn. R. 7007.3000 d) Minn. R. 7017.2020 40 CFR § 60.8(a)	a) Standards of performance limits for particulate matter for industrial equipment. b) Stack vent limit, from a previous permitting action, taken to keep an emissions increase to less than significant as defined in 40 CFR § 52.21. c) Pollution control requirements, from a previous permitting action, to keep an emissions increase to less than significant as defined in 40 CFR § 52.21. d) Testing requirements to ensure and verify compliance.
<b>SV 011</b>	a) Minn. R. 7011.0715 b) CAAA of 1990 40 CFR § 52.21 Minn. R. 7007.0800	a) Standards of performance limits for particulate matter for industrial equipment. b) Operational requirements comply with Consent Decree requirements.
<b>SV 012</b>	a) Minn. R. 7011.0715 b) Minn. R. 7007.0800	a) Standards of performance limits for particulate matter for industrial equipment. b) Pollution control requirements.
<b>SV 013 SV 014</b>	a) Minn. R. 7011.0715 b) Minn. R. 7007.0800 c) Minn. R. 7017.2020 40 CFR § 60.8(a)	a) Standards of performance limits for particulate matter for industrial equipment. b) Pollution control requirements. c) Testing requirements to ensure and verify compliance.
<b>SV 015 SV 016</b>	a) Minn. R. 7011.0715	a) Standards of performance limits for particulate matter for industrial equipment.

	b) Minn. R. 7007.0800	b) Pollution control requirements.
<b>SV 017</b>	a) Minn. R. 7011.1005 b) Minn. R. 7007.0800	a) Standards of performance requirement for dry bulk agricultural commodity facilities. b) Pollution control requirements.
<b>SV 018</b>	a) Minn. R. 7011.1005 b) Minn. R. 7007.0800	a) Standards of performance requirement for dry bulk agricultural commodity facilities. b) Pollution control requirements.
<b>EU 059</b> <b>EU 066</b>	a) Minn. R. 7011.0510 b) Minn. R. 7007.0800 c) 40 CFR pt 63, sub. DDDDD d) Minn. R. 7017.2020 40 CFR § 60.8(a)	a) Standards of performance for existing indirect heating equipment. b) Restriction on fuel use and recordkeeping requirements to ensure compliance. c) Subpart DDDDD— National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters. d) Testing requirements to ensure and verify compliance.
<b>CE 028</b>	Minn. R. 7007.0800	Control efficiency limits and operational requirements.

### 3. Technical Information

#### 3.2 Emission Calculations

Supporting emission calculations are attached.

#### 3.3 Periodic Monitoring

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

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

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

Table 3.2 summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

**Table 3.2 Periodic Monitoring**

<b>Emission Unit or Group</b>	<b>Requirement (basis)</b>	<b>Additional Monitoring</b>	<b>Discussion</b>
Total Facility (TF)	<p>a. VOC Solvent Loss Ratio (SLR) less than or equal to 90 percent of the Solvent Loss Factor on a 12-month Rolling Average (CAAA of 1990, Minn. R. 7007.0800, 40 CFR pt 63, subp. GGGG)</p> <p>b. Fugitive Emission Control Plan (Minn. Stat. § 116.07 subd. 4a; Minn. R. 7007.0800)</p> <p>c. Computer Dispersion Modeling (Minn. R. 7007.0800)</p>	<p>a. On going recordkeeping and calculation of the SLR.</p> <p>b. On going recordkeeping to verify actions are followed in the control plan.</p>	<p>The SLR limit complies with the consent decree and NESHAP.</p> <p>ADM will calculate and maintain record of the 12-month rolling compliance ratio calculation on a monthly basis.</p> <p>The intention of the maximum achievable control technology (MACT) standard is to reduce HAP emissions from the solvent extraction for Vegetable Oil Production. By complying with the monitoring and operating procedures of the rule, ADM will reduce HAP emissions. The specifications in the rule will be adequate to have reasonable assurance of compliance.</p> <p>ADM will submit the fugitive emission control plan within 60 days after permit issuance to the Commissioner for review and approval.</p> <p>The Permittee will submit a modeling protocol within 1,096 after permit issuance for data collection purposes</p>

<b>Emission Unit or Group</b>	<b>Requirement (basis)</b>	<b>Additional Monitoring</b>	<b>Discussion</b>
Fabric Filters (GP 001)	PM/PM10: the fabric filters must be maintained to achieve 99% control efficiency or greater  (Minn. R. 7007.0800, Minn. R. 7011.1005)	Recordkeeping: O&M inspections, pressure drop and visible emissions	Monitoring based on the requirements from Minnesota Performance Standard for Control Equipment is adequate to have a reasonable assurance of compliance.
Fabric Filters (GP 002)	PM/PM10: the fabric filters must be maintained to achieve 89 percent control efficiency or greater  (Minn. R. 7007.0800, Minn. R. 7011.1005)	Recordkeeping: O&M inspections, pressure drop and visible emissions	Monitoring based on the requirements from Minnesota Performance Standard for Control Equipment is adequate to have a reasonable assurance of compliance.
Cyclone Units (GP 003)	PM/PM10: the cyclones must be maintained to achieve 80 percent control efficiency or greater  (Minn. R. 7007.0800, Minn. R. 7011.1005)	Recordkeeping: O&M inspections and visible emissions.	Monitoring based on the requirements from Minnesota Performance Standard for Control Equipment is adequate to have a reasonable assurance of compliance.
Truck Receiving Pit 1 (SV 001, CE 001 (GP 002))	a. PM: $\leq 0.3$ grains/dscf (Minn. R. 7011.0715)  b. Opacity: $\leq 5\%$ (fugitive) (Minn. R. 7011.1005)  c. Opacity: $\leq 10\%$ (control device) (Minn. R. 7011.1105)  d. Pollution Control Equipment (Minn. R. 7007.0800)	a., b., & c.: None  d. Operate at all times when the emissions unit is in operation	Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.
Truck Receiving Pit 2 (SV 002, CE 002 (GP 002))	a. PM: $\leq 0.3$ grains/dscf (Minn. R. 7011.0715)  b. Opacity: $\leq 5\%$ (fugitive) (Minn. R. 7011.1005)  c. Opacity: $\leq 10\%$ (control device)	a., b., & c.: None  d. Operate at all times when the emissions unit is in operation	Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
	(Minn. R. 7011.1105)  d. Pollution Control Equipment (Minn. R. 7007.0800)		
Railcar Receiving (SV 003, CE 003(GP 002))	a. PM: $\leq 0.01$ grains/dscf (40 CFR § 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800)  b. Opacity: $\leq 5\%$ (fugitive) (Minn. R. 7011.1005)  c. Opacity: $\leq 10\%$ (control device) (Minn. R. 7011.1105)  d. Pollution Control Equipment (40 CFR § 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800)	a., b., & c.: Performance Test.  d. Operate at all times when the emissions unit is in operation	The Permittee will test to verify PM emissions, PM10 emission factors, opacity and develop emission factors to verify and update emission calculations. Furthermore, the permittee will establish a testing frequency plan.  Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.
Process Elevator 1a & 1b (SV 005, CE 006(GP 001))	a. Opacity: $\leq 5\%$ (fugitive) (Minn. R. 7011.1005)  b. Opacity: $\leq 10\%$ (control device) (Minn. R. 7011.1105)  c. Pollution Control Equipment (Minn. R. 7007.0800)	a. & b.: None.  c. Operate at all times when the emissions unit is in operation	Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.
Old Flour Mill (SV 005, CE 009(GP 001))	a. PM: $\leq 0.033$ grains/dscf (40 CFR § 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800)  b. Opacity: $\leq 5\%$ (fugitive) (Minn. R. 7011.1005)	a., b., & c.: Performance Test.  d. Operate at all times when the emissions unit is in operation	The Permittee will test to verify PM emissions, PM10 emission factors, opacity and develop emission factors to verify and update emission calculations. Furthermore, the permittee will establish a testing frequency plan.

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
	<p>c. Opacity: ≤ 10 % (control device) (Minn. R. 7011.1105)</p> <p>d. Pollution Control Equipment (40 CFR § 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800)</p>		<p>Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.</p>
<p>Elevators and Storage (SV 008, CE 010 (GP003))</p>	<p>a. PM: ≤ 0.3 grains/dscf (Minn. R. 7011.0715)</p> <p>b. Opacity: ≤ 20% (Minn. R. 7011.0715)</p> <p>c. Pollution Control Equipment (Minn. R. 7007.0800)</p>	<p>a. &amp; b.: Performance Test.</p> <p>c. Operate at all times when the emissions unit is in operation</p>	<p>The Permittee will test to verify PM emissions, PM10 emission factors, opacity and develop emission factors to verify and update emission calculations. Furthermore, the permittee will establish a testing frequency plan.</p> <p>Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.</p>
<p>Flaking Rolls (SV 009, CE 005(GP 003))</p>	<p>a. PM: ≤ 0.0285 grains/dscf (40 CFR § 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800)</p> <p>b. Opacity: ≤ 20% (Minn. R. 7011.0715)</p> <p>c. Pollution Control Equipment (40 CFR § 52.21 and Minn. R. 7007.3000; Minn. R. 7007.0800)</p>	<p>a. &amp; b.: Performance Test.</p> <p>c. Operate at all times when the emissions unit is in operation</p>	<p>The Permittee will test to verify PM emissions, PM10 emission factors, opacity and develop emission factors to verify and update emission calculations. Furthermore, the permittee will establish a testing frequency plan.</p> <p>Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.</p>
<p>Extractor/DTDC (SV 011, CE028)</p>	<p>a. PM: ≤ 0.3 grains/dscf (Minn. R. 7011.0715)</p> <p>b. Opacity: ≤ 20% (Minn. R. 7011.0715)</p> <p>c. Pollution Control</p>	<p>a. &amp; b.: none</p> <p>c. Operate at all</p>	<p>Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.</p>



<b>Emission Unit or Group</b>	<b>Requirement (basis)</b>	<b>Additional Monitoring</b>	<b>Discussion</b>
	Equipment (CAAA of 1990, Minn. R. 7007.0800)	times when the emissions unit is in operation	
DTDC (SV 012, CE 013(GP 003))	a. PM: $\leq 0.3$ grains/dscf (Minn. R. 7011.0715)  b. Opacity: $\leq 20\%$ (Minn. R. 7011.0715)  c. Pollution Control Equipment (Minn. R. 7007.0800)	a. & b.: none   c. Operate at all times when the emissions unit is in operation	Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.
Meal Grinding (SV 013, CE 014(GP 001))	a. PM: $\leq 0.3$ grains/dscf (Minn. R. 7011.0715)  b. Opacity: $\leq 20\%$ (Minn. R. 7011.0715)  c. Pollution Control Equipment (Minn. R. 7007.0800)	a. & b.: Performance Test.   c. Operate at all times when the emissions unit is in operation	The Permittee will test to verify PM emissions, PM <sub>10</sub> emission factors, opacity and develop emission factors to verify and update emission calculations. Furthermore, the permittee will establish a testing frequency plan.  Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.
Pellet Cooler (SV 014, CE 014(GP 001))	a. PM: $\leq 0.3$ grains/dscf (Minn. R. 7011.0715)  b. Opacity: $\leq 20\%$ (Minn. R. 7011.0715)  c. Pollution Control Equipment (Minn. R. 7007.0800)	a. & b.: Performance Test.   c. Operate at all times when the emissions unit is in operation	The Permittee will test to verify PM emissions, PM <sub>10</sub> emission factors, opacity and develop emission factors to verify and update emission calculations. Furthermore, the permittee will establish a testing frequency plan.  Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.
River Bin Tank 17 (SV 015, CE 007(GP 001))	a. PM: $\leq 0.3$ grains/dscf (Minn. R. 7011.0715)  b. Opacity: $\leq 20\%$ (Minn. R. 7011.0715)  c. Pollution Control Equipment (Minn. R. 7007.0800)	a. & b.: none   c. Operate at all times when the emissions unit is in operation	Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
River Bin Tank 18 (SV 016, CE 008(GP 001))	<p>a. PM: <math>\leq 0.3</math> grains/dscf (Minn. R. 7011.0715)</p> <p>b. Opacity: <math>\leq 20\%</math> (Minn. R. 7011.0715)</p> <p>c. Pollution Control Equipment (Minn. R. 7007.0800)</p>	<p>a. &amp; b.: none</p> <p>c. Operate at all times when the emissions unit is in operation</p>	<p>Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.</p>
Rail/Barge Loadout/Barge Receiving (SV 017, CE 021(GP 002))	<p>a. Opacity: <math>\leq 5\%</math> (fugitive unloading) (Minn. R. 7011.1005)</p> <p>b. Opacity: <math>\leq 10\%</math> (fugitive loading) (Minn. R. 7011.1005)</p> <p>c. Opacity: <math>\leq 20\%</math> (ship or barge) (Minn. R. 7011.1105)</p> <p>d. Opacity: <math>\leq 10\%</math> (control device) (Minn. R. 7011.1105)</p> <p>e. Pollution Control Equipment (Minn. R. 7007.0800)</p>	<p>a., b., c. &amp; d.: none</p> <p>e. Operate at all times when the emissions unit is in operation</p>	<p>Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.</p>
Truck Loadout (SV 018, CE 004(GP 002))	<p>a. Opacity: <math>\leq 10\%</math> (fugitive loading) (Minn. R. 7011.1005)</p> <p>b. Opacity: <math>\leq 10\%</math> (control device) (Minn. R. 7011.1105)</p> <p>c. Pollution Control Equipment (Minn. R. 7007.0800)</p>	<p>a. &amp; b.: none.</p> <p>c. Operate at all times when the emissions unit is in operation</p>	<p>Since the Stack Vent is controlled by the associated control equipment, no additional periodic monitoring is warranted.</p>

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
Boiler #1 (EU 059)	<p>a. PM: <math>\leq 0.6</math> lb/MMBtu (Minn. R. 7011.0510)</p> <p>b. Opacity: <math>\leq 20</math> % with exceptions (Minn. R. 7011.0510)</p> <p>c. Sulfur Content of Fuel: less than 2.0% by weight of fuel oil (Minn. R. 7007.0800)</p> <p>d. Fuel Restriction: Natural gas and Fuel oil (Minn. R. 7007.0800)</p>	<p>a., &amp; b. PM and Opacity: None</p> <p>c. &amp; d. Recordkeeping: Record and maintain records of the type of fuel combusted in the unit on a daily and monthly basis.</p>	<p>Since the boilers are fired with natural gas and fuel oil as a back up, there should be no significant PM emissions or visible emissions from burning natural gas. The Permittee will check for visible emissions when burning fuel oil. Therefore, while there is an applicable requirement, the Permittee will demonstrate that the emission units are and will continue to operate such that the emissions are well below the emission limits by certifying that natural gas, and fuel oil is the only fuels fired in the boilers.</p>
Boiler #2 (EU 066)	<p>a. PM: <math>\leq 0.6</math> lb/MMBtu (Minn. R. 7011.0510)</p> <p>b. Opacity: <math>\leq 20</math> % with exceptions (Minn. R. 7011.0510)</p> <p>c. Fuel Restriction: Natural gas (Minn. R. 7007.0800)</p>	<p>a., &amp; b. PM and Opacity: None</p> <p>c. Recordkeeping: Record and maintain records of the type of fuel combusted in the unit on a monthly basis.</p>	<p>As a natural gas fired boiler, the likelihood of violating the PM and opacity emission standard is low as long as the units are properly maintained. As a result, no additional periodic monitoring is warranted.</p>
MO Absorber – Cold H2O Conditioner (CE 028)	<p>VOC: equipment must be maintained to achieve 95 percent control efficiency or greater (Minn. R. 7007.0800)</p>	<p>Recordkeeping: O&amp;M, temperatures, flow rates, inspections, calibrations</p>	<p>Monitoring based on the requirements from Minnesota Performance Standard for Control Equipment is adequate to have a reasonable assurance of compliance.</p>

### **3.4 Insignificant Activities**

ADM has several operations, which are classified as insignificant activities. These are listed in Appendix B to the permit. These insignificant emission units (IEU) are subject to the state general applicable requirements. It is our belief that IEU's listed in Appendix B to the permit associated with inconsequential environmental impacts and present little potential for violations of generally applicable requirements, therefore no monitoring will be required.

### **3.5 Permit Organization**

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements. One item that deviates from guidance is the listing of certain applicable requirements at the group level even though they apply at the individual unit or control device. In general, limits that apply to individual pieces of equipment should be tracked at the unit level or stack/vent level and should not be listed as a GP. The main reason is if there is noncompliance with a limit by one unit within the group, the computer system would say the whole group was out of compliance.

One area where this permit deviates slightly from Delta guidance is in the use of appendices. While appendices are fully enforceable parts of the permit, in general, any requirement that the MPCA thinks should be tracked (e.g., limits, submittals, etc.), should be in Table A or B. The main reason is that the appendices are word processing sections and are not part of the tracking system. Violation of the appendices can be enforced, but the computer system will not automatically generate the necessary enforcement notices or documents. Staff must generate these.

### **3.6 Comments Received**

Public Notice Period: December 24, 2005 – January 23, 2006.

No comments were received during the comment period. The permit was administratively edited for clarification purposes.

## **4. Conclusion**

Based on the information provided by ADM Oilseed Processing- Red Wing Facility, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 04900001-001 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules. This permit is being issued under Title V issuance goals.

Staff Members on Permit Team:

Permit writer/Engineer: Steven Gorg

Enforcement Staff: Scott Parr

Peer Reviewer: Amrill Okonkwo

Administrative Support: Laurie O'Brien

Data Entry: Beckie Olson

Attachments: A. Form CD-01 (Compliance Plan)  
B. PTE Summary and Emission Calculations

Attachment A  
Form CD-01 (Compliance Form)  
(Paper Copy Only)

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Attachment B  
PTE Summary and Emission Calculations  
(Paper Copy Only)



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