

**AIR EMISSION PERMIT NO. 14300014- 002
IS ISSUED TO**

Heartland Corn Products

Heartland Corn Products
E State Hwy 19
Winthrop, Sibley County, MN 55396

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	02/23/1995
Major Amendment	04/26/99

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 as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: State; Syn Min PSD/NSR

Issue Date: October 8, 1999

Expiration:
All Title I Conditions do not expire.

Rodney E. Massey
Manager
South District

For Karen A. Studders
Commissioner
Minnesota Pollution Control Agency

DS:jfh

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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. Certain requirements which have been determined not to apply are listed in Table A of this permit.

The permit shield, however does not apply to:

1. **Any national ambient air quality standards adopted under section 109 of the Clean Air Act or increment or visibility under Part C of Title I of the Clean Air Act;**
2. **Any state ambient air quality standard under Minn. R. ch. 7009; and**
3. **The state noise pollution control rules, Minn. R. ch. 7030.**

FACILITY DESCRIPTION:

This facility produces fuel grade ethanol and distillers dried grains with solubles (DDGS). Emission sources include receiving, storing, handling, and cleaning corn; steam production (boiler); drying, storage, handling, and shipping of DDGS; fermentation and distillation; storage of ethanol of varying purities at various points in the process; storage of gasoline (denaturant); and shipping of denatured ethanol. Primary pollutants include particulate matter, particulate matter smaller than 10 microns, volatile organic compounds, and nitrogen oxides.

This permit action allows continued operation of the facility, and increases the EU 031 DDGS cooling cyclone emission limits for PM/PM₁₀ from 0.42 lb/hr to 1.6 lb/hr. In addition, this permit amendment reduces the SV 004 particulate matter emission limit from 7.75 lb/hr to 5.0 lb/hr, and raises the SV 004 PM₁₀ emission limit from 7.75 to 8.0 lb/hr.

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

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

Subject Item:**Total Facility**

What to do	Why to do it
Production: less than or equal to 19000000 gallons/year using 12-month Rolling Sum of fuel ethanol (pure ethanol, prior to addition of denaturant).	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 & Minn. R. 7007.0200
Record keeping: By the 15th day of every month, record the gallons of ethanol produced during the previous month, and the gallons of ethanol produced during the previous 12 months (12-month rolling sum).	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 & Minn. R. 7007.0200
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. The plan shall specify the minimum values for pressure drop and water flow rate for CE 003 and CE 005, and the minimum and maximum values for pressure drop for CE 004 and EU 031.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Shutdowns: Notify the Commissioner at least 24 hours in advance of a planned shutdown, or as soon as possible after an unplanned shutdown of any process or control equipment, if the shutdown would cause an increase in the emission of any regulated air pollutant. At the time of notification, notify the Commissioner of the cause of the shutdown and the estimated duration. Notify the Commissioner again when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdowns: Notify the Commissioner with 24 hours after a breakdown of more than one hour duration of any process or control equipment if the breakdown causes an increase in the emission of any regulated air pollutant. At the time of notification or as soon thereafter as possible, the permittee shall also notify the Commissioner of the cause of the breakdown and the estimated duration. Notify the Commissioner again when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Oral Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify orally or by facsimile the Commissioner or the state duty officer, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Written Notification of Deviations Endangering Human Health or the Environment: within two (2) working days after 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: cause of the deviation; exact dates of the period of the deviation; if the deviation has not been corrected, the anticipated time it is expected to continue; and 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
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.	Minn. R. 7007.0800, subp. 9(A)
Record keeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007.0800, subp. 5(B)
Record keeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original 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)
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)
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit.	Minn. R. 7017.2025

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: GP 001 Tanks subject to NSPS subp. Kb**Associated Items:** TK 001 Ethanol & Water

TK 002 Ethanol

TK 003 Unleaded Gas

TK 004 Ethanol & Unleaded Gas

TK 005 Ethanol & Unleaded Gas

What to do	Why to do it
Record keeping: Maintain records showing the dimensions of each tank and an analysis showing each tank's capacity.	40 CFR Section 60.116b(b); Minn. R. 7011.1520(C)

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: GP 002 Denatured Ethanol Tanks**Associated Items:** TK 004 Ethanol & Unleaded Gas

TK 005 Ethanol & Unleaded Gas

What to do	Why to do it
A. POLLUTION CONTROL REQUIREMENTS	hdr
Each storage vessel in GP 002 shall be equipped with a fixed roof in combination with an internal floating roof meeting the specifications of paragraph (a)(1) of this section.	40 CFR Section 60.112b(a); Minn. R. 7011.1520(C)
Each internal floating roof shall be equipped with the following closure devices between the wall of the storage vessel and the edge of the internal floating roof: (B) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.	40 CFR Section 60.112b(a)(1)(ii)(B); Minn. R. 7011.1520(C)
B. MONITORING REQUIREMENTS	hdr
Visually inspect the internal floating roof, the primary seal, and the secondary seal, prior to filling the storage vessel with Volatile Organic Liquid (VOL). If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric, or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.	40 CFR Section 60.113b(a)(1); Minn. R. 7011.1520(C)
Visually inspect the internal floating roof, the primary seal, and the secondary seal through manholes and roof hatches on the fixed roof at least once every twelve (12) months after initial fill as required by this paragraph.	40 CFR Section 60.113b(a)(3)(ii); Minn. R. 7011.1520(C)
Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time each storage vessel is emptied and degassed as required by this paragraph. In no event shall inspections conducted in accordance with this provision occur at intervals greater than five (5) years.	40 CFR Section 60.113b(a)(3)(i); Minn. R. 7011.1520(C)
C. RECORDKEEPING REQUIREMENTS	hdr
Keep a record of each inspection performed as required by 40 CFR Section 60.113b(a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).	40 CFR Section 60.115b(a)(2); Minn. R. 7011.1520(C)
D. REPORTING REQUIREMENTS	hdr
After each inspection required by 40 CFR Section 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR Section 60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of 40 CFR Section 60.112b(a)(1) or 40 CFR Section 60.113b(a)(3)(ii) and list each repair made.	40 CFR Section 60.115b(a)(4); Minn. R. 7011.1520(C)
Notification: If an inspection is required (under 40 CFR Section 60.113b(a)(1) or 40 CFR Section 60.113b(a)(3)(i)), notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel, to afford the Administrator the opportunity to have an observer present. If the inspection is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to refilling the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to refilling.	40 CFR Section 60.115b(a)(5); Minn. R. 7011.1520(C)

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: GP 003 Baghouse Monitoring Requirements**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

SV 001 Grain Handling (CE 001)

SV 002 Hammermill (CE 002)

What to do	Why to do it
Operation and Maintenance of Fabric Filter: The Permittee shall operate and maintain the fabric filter according to the control equipment manufacturer's specifications.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 14
Visible Emissions/Pressure Drop Monitoring and Recordkeeping: Once each day of operation of any GP 003 fabric filter, the Permittee shall check the outlet of each operating fabric filter during daylight hours for any visible emissions. If inclement weather prohibits a visible emission check, once each day the Permittee shall observe and record the pressure drop across each operating fabric filter. Record the time and date of the observation, and whether or not any visible emissions were observed or the pressure drop.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 14
Corrective Action: If visible emissions are observed, and/or if the pressure drop is outside the permitted range specified in this subject item, the Permittee shall follow the Operation and Maintenance Plan for the fabric filter and take corrective actions as soon as possible to eliminate the visible emissions and/or return the pressure drop to within the permitted range. The Permittee shall keep a record of the type and date of all corrective actions taken.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 14
Inspect quarterly, or as required by manufacturing specifications, all components that are not subject to wear or plugging, including structural components, housing, ducts, and hoods. Maintain a written record of the inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 2 and subp. 14
Inspect monthly, or as required by manufacturing specifications, all components that are subject to wear or plugging. Maintain a written record of the inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 2 and subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: GP 004 Scrubber Monitoring Requirements**Associated Items:** CE 003 Packed-Gas Adsorption Column

CE 005 Packed-Gas Adsorption Column

SV 003 Fermentation (CE 003)

SV 005 Distillation (CE 005)

What to do	Why to do it
Record the pressure drop and water flow rate of each scrubber once each day of operation.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Corrective Action: If the applicable pressure drop is not within the permitted range specified under SV 003 and/or SV 005, and/or the applicable water flow rate is not equal to or greater than the minimum values specified under SV 003 and/or SV 005, the Permittee shall take corrective action as soon as possible to achieve the required operating values. The Permittee shall keep a record of the type and date of all corrective actions taken.	Title I Condition: Corrective action to avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 14
Inspect quarterly, or as required by manufacturing specifications, all components that are not subject to wear or plugging, including structural components, housing, ducts, and hoods. Maintain a written record of the inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 2 and subp. 14
Inspect monthly, or as required by manufacturing specifications, all components that are subject to wear or plugging. Maintain a written record of the inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 2 and subp. 14
Calibrate the gauges annually, or as often as required by manufacturing specifications and maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subp. 2 and subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: GP 005 Cyclone Monitoring Requirements**Associated Items:** CE 004 Multiple Cyclone w/o Fly Ash Reinjection - Most Multiclones

SV 004 DDGS Dryer (CE 004)

SV 009 DDGS Cooling Cyclone (EU 031)

What to do	Why to do it
Record the pressure drop at each cyclone once each day of operation.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Corrective Action: If the applicable pressure drop is not within the permitted range specified under SV 004 and/or SV 009, the Permittee shall take corrective action as soon as possible to achieve the required operating values. The Permittee shall keep a record of the type and date of all corrective actions taken.	Title I Condition: Corrective action to avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 14
Inspect quarterly, or as required by manufacturing specifications, all components that are not subject to wear or plugging, including structural components, housing, ducts, and hoods. Maintain a written record of the inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 2 and subp. 14
Inspect monthly, or as required by manufacturing specifications, all components that are subject to wear or plugging. Maintain a written record of the inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 2 and subp. 14
Calibrate the pressure drop gauge annually, or as often as required by manufacturer's specifications and maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subp. 2 and subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: GP 006 NOx Emissions From Fuel Combustion

Associated Items: EU 015 DDGS Dryer

EU 018 Boiler

EU 034 Boiler

What to do	Why to do it
Nitrogen Oxides: less than or equal to 85 tons/year using 12-month Rolling Sum	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Recordkeeping: By the 15th of each month, calculate and record the GP 006 NOx emissions for the previous month, and the GP 006 NOx emissions from the previous 12 months (12-month rolling sum). To calculate the monthly NOx emissions, use the recordkeeping requirements under Option A (described below) and Equation 1 (as described in the Appendix). The Permittee shall not use Option B (as described below) and Equation 2 (as described in the Appendix) to calculate NOx emissions until after completion of all performance testing requirements (described below), and the Permittee has received written confirmation of the test results from the agency.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Fuel Burned: Natural gas and propane only.	Minn. Stat. Section 116.07, subd. 4a; Minn. R. 7007.0800, subp. 2
OPTION A - FUEL USAGE RECORDKEEPING REQUIREMENTS IF USING UNCONTROLLED AP-42 NOx EMISSION FACTORS FOR ALL GP 006 EMISSION UNITS	hdr
Recordkeeping - Fuel Usage: Once each day, record the following: a. cubic feet of natural gas combusted during the previous day; b. gallons of propane combusted during the previous day.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Recordkeeping - Fuel Usage: By the 15th of each month, calculate and record the following: a. cubic feet of natural gas combusted during the previous month; b. gallons of propane combusted during the previous month.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
OPTION B - FUEL USAGE RECORDKEEPING REQUIREMENTS IF USING TEST-BASED NOx EMISSION FACTORS FOR ONE OR MORE GP 006 EMISSION UNITS	hdr
Recordkeeping - Fuel Usage: Once each day, record the following: a. cubic feet of natural gas combusted by the existing boiler (EU 018) during the previous day; b. cubic feet of natural gas combusted by the the new boiler (EU 034) during the previous day; c. cubic feet of natual gas combusted by the dryer (EU 015) during the previous day; d. gallons of propane combusted by the existing boiler (EU 018) during the previous day; e. gallons of propane combusted by the new boiler (EU 034) during the previous day; f. gallons of propane combusted by the dryer (EU 015) during the previous day.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Recordkeeping - Fuel Usage: By the 15th day of each month, calculate and record the following: a. cubic feet of natural gas combusted by the existing boiler (EU 018) during the previous month; b. cubic feet of natural gas combusted by the the new boiler (EU 034) during the previous month; c. cubic feet of natual gas combusted by the dryer (EU 015) during the previous month; d. gallons of propane combusted by the existing boiler (EU 018) during the previous month; e. gallons of propane combusted by the new boiler (EU 034) during the previous month; f. gallons of propane combusted by the dryer (EU 015) during the previous month.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
TESTING REQUIREMENTS (APPLICABLE IF USING OPTION B - FUEL USAGE RECORDKEEPING REQUIREMENTS)	hdr
Performance Test: due 30 days after Notification of intent to conduct a performance test to establish an emission factor for NOx when combusting natural gas or propane for GP 006.	Minn. R. 7017.2020, subp. 1 and Minn. R. 7017.2030, subp. 4
Performance Test Pre-test Meeting: due 7 days before each Performance Test.	

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

<p>General Performance Test (PT) Requirements:</p> <p>Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements.</p> <p>PT Notifications (written): due 30 days before each Performance Test</p> <p>PT Plan: due 30 days before each Performance Test</p> <p>PT Pre-test Meeting: due 7 days before each Performance Test</p> <p>PT Report: due 45 days after each Performance Test</p> <p>PT Report - Microfiche: due 105 days after each Performance Test</p>	<p>Minn. R. 7017.2030, subp. 1-4, and Minn. R. 7017.2035, subp. 1 and 2</p>
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TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: SV 001 Grain Handling (CE 001)**Associated Items:** EU 001 Corn Dump Pit/Auger

EU 002 Corn Elevator

EU 003 Scalper

EU 004 Corn Bin

EU 005 Corn Bin

EU 006 Corn Bin

EU 007 Corn Bin

EU 016 DDGS Dump Pit/Auger

EU 020 DDGS Elevator/Truck Loadout

GP 003 Baghouse Monitoring Requirements

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 1.2 lbs/hour	Title I Condition: To avoid major source classification under 40 CFR Section 52.21
Total Particulate Matter: less than or equal to 0.1 grains/dry standard cubic foot or the allowable concentration at the exhaust flow rate, as described in Minn. R. 7011.0735.	Minn. R. 7011.1005, subp. 3(D)
Particulate Matter < 10 micron: less than or equal to 1.2 lbs/hour	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1005, subp. 3(D)
B. POLLUTION CONTROL REQUIREMENTS	hdr
Total Particulate Matter: greater than or equal to 95 percent collection efficiency	Title I Condition: To avoid major source classification under 40 CFR Section 52.21
Particulate Matter < 10 micron: greater than or equal to 81 percent collection efficiency	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Pressure Drop: greater than or equal to 1 inches of water column and less than or equal to 6 inches of water column for CE 001. See GP 003 for additional CE 001 requirements.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: SV 002 Hammermill (CE 002)**Associated Items:** EU 008 Hammermill/Belt Scale

GP 003 Baghouse Monitoring Requirements

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.51 lbs/hour	Title I Condition: To avoid major source classification under 40 CFR Section 52.21
Total Particulate Matter: less than or equal to 0.1 grains/dry standard cubic foot or the allowable concentration at the exhaust flow rate, as described in Minn. R. 7011.0735.	Minn. R. 7011.1005, subp. 3(D)
Particulate Matter < 10 micron: less than or equal to 0.51 lbs/hour	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 & Minn. R. 7007.0200
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1005, subp. 3(D)
B. POLLUTION CONTROL REQUIREMENTS	hdr
Total Particulate Matter: greater than or equal to 97 percent collection efficiency	Title I Condition: To avoid major source classification under 40 CFR Section 52.21
Particulate Matter < 10 micron: greater than or equal to 94 percent collection efficiency	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Pressure Drop: greater than or equal to 2 inches of water column and less than or equal to 8 inches of water column for CE 002. See GP 003 for additional CE 002 requirements.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7007.0800, subp. 14

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: SV 003 Fermentation (CE 003)**Associated Items:** EU 022 Fermenter

EU 023 Fermenter

EU 024 Fermenter

EU 025 Beer Well

EU 033 Fermenter

GP 004 Scrubber Monitoring Requirements

What to do	Why to do it
A. EMISSION LIMITS	hdr
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Volatile Organic Compounds: less than or equal to 5.13 lbs/hour	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
B. POLLUTION CONTROL REQUIREMENTS	hdr
Volatile Organic Compounds: greater than or equal to 98 percent collection efficiency	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Pressure Drop: greater than or equal to 2 inches of water column and less than or equal to 10 inches of water column for CE 003.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Water flow rate: greater than or equal to 22 gallons/minute for CE 003. See GP 004 for additional CE 003 requirements.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
C. TESTING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 01/08/1999 to measure SV 003 volatile organic compounds. The Tests shall be conducted at an interval not to exceed 60 months between test dates.	Title I Condition: Emissions testing to avoid major source classification under 40 CFR Section 52.21; 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7017.2020, subp. 1 and Minn. R. 7017.2030, subp. 4
Performance Test Pre-test Meeting: due 7 days before each Performance Test.	
General Performance Test (PT) Requirements:	Minn. R. 7017.2030, subp. 1-4, and Minn. R. 7017.2035, subp. 1 and 2
Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements.	
PT Notifications (written): due 30 days before each Performance Test	
PT Plan: due 30 days before each Performance Test	
PT Pre-test Meeting: due 7 days before each Performance Test	
PT Report: due 45 days after each Performance Test	
PT Report - Microfiche: due 105 days after each Performance Test	

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: SV 004 DDGS Dryer (CE 004)**Associated Items:** EU 015 DDGS Dryer

GP 005 Cyclone Monitoring Requirements

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 5.0 lbs/hour	Title I Condition: To avoid major source classification under 40 CFR Section 52.21
Total Particulate Matter: less than or equal to 0.0766 grains/dry standard cubic foot or the allowable concentration at the exhaust flow rate, as described in Minn. R. 7011.0735.	Minn. R. 7011.1005, subp. 3(D)
Particulate Matter < 10 micron: less than or equal to 8.0 lbs/hour	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1005, subp. 3(D)
Volatile Organic Compounds: less than or equal to 7.85 lbs/hour	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
B. POLLUTION CONTROL REQUIREMENTS	hdr
Total Particulate Matter: greater than or equal to 80 percent collection efficiency	Title I Condition: To avoid major source classification under 40 CFR Section 52.21
Particulate Matter < 10 micron: greater than or equal to 80 percent collection efficiency	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Pressure Drop: greater than or equal to 4 inches of water column and less than or equal to 8 inches of water column for CE 004. See GP 005 for additional CE 004 requirements.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
C. TESTING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 04/05/1999 to measure SV 004 VOC emissions. The tests shall be conducted at an interval not to exceed 60 months between test dates.	Title I Condition: Emissions testing to avoid major source classification under 40 CFR Section 52.21; 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7017.2020, subp. 1 and Minn. R. 7017.2030, subp. 4
Performance Test Pre-test Meeting: due 7 days before each Performance Test.	
Performance Test: due before end of each 36 months starting 01/08/1999 to measure SV 004 PM emissions. The tests shall be conducted at an interval not to exceed 36 months between test dates.	Title I Condition: Emissions testing to avoid major source classification under 40 CFR Section 52.21; Minn. R. 7007.0200; Minn. R. 7017.2020, subp. 1 and Minn. R. 7017.2030, subp. 4
Performance Test Pre-test Meeting: due 7 days before each Performance Test	
Performance Test: due before end of each 36 months starting 01/08/1999 to measure SV 004 PM10 emissions. The tests shall be conducted at an interval not to exceed 36 months between test dates.	Title I Condition: Emissions testing to avoid major source classification under 40 CFR Section 52.21; 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7017.2020, subp. 1 and Minn. R. 7017.2030, subp. 4
Performance Test Pre-test Meeting: due 7 days before each Performance Test	
General Performance Test (PT) Requirements: Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements. PT Notifications (written): due 30 days before each Performance Test PT Plan: due 30 days before each Performance Test PT Pre-test Meeting: due 7 days before each Performance Test PT Report: due 45 days after each Performance Test PT Report - Microfiche: due 105 days after each Performance Test	Minn. R. 7017.2030, subp. 1-4, and Minn. R. 7017.2035, subp. 1 and 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: SV 005 Distillation (CE 005)

Associated Items: EU 009 Beer Stripper
 EU 010 Rectifier
 EU 011 Side Stripper
 EU 012 Molecular Sieve
 EU 014 Evaporator
 EU 026 Liquefaction Tank 1
 EU 027 Liquefaction Tank 2
 EU 028 Slurry Tank
 EU 029 Yeast Tank
 EU 030 190 Proof Rundown Tank
 GP 004 Scrubber Monitoring Requirements

What to do	Why to do it
A. EMISSION LIMITS	hdr
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Volatile Organic Compounds: less than or equal to 0.71 lbs/hour	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
B. POLLUTION CONTROL REQUIREMENTS	hdr
Volatile Organic Compounds: greater than or equal to 97 percent collection efficiency	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 & Minn. R. 7007.0200
Pressure Drop: greater than or equal to 2 inches of water column and less than or equal to 10 inches of water column for CE 005.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
Water flow rate: greater than or equal to 2.9 gallons/minute for CE 005. See GP 004 for additional CE 005 requirements.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
C. TESTING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 01/08/1999 to measure SV 005 volatile organic compounds. The Tests shall be conducted at an interval not to exceed 60 months between test dates.	Title I Condition: Emissions testing to avoid major source classification under 40 CFR Section 52.21; 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7017.2020, subp. 1 and Minn. R. 7017.2030, subp. 4
Performance Test Pre-test Meeting: due 7 days before each Performance Test.	
General Performance Test (PT) Requirements: Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements. PT Notifications (written): due 30 days before each Performance Test PT Plan: due 30 days before each Performance Test PT Pre-test Meeting: due 7 days before each Performance Test PT Report: due 45 days after each Performance Test PT Report - Microfiche: due 105 days after each Performance Test	Minn. R. 7017.2030, subp. 1-4, and Minn. R. 7017.2035, subp. 1 and 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: SV 009 DDGS Cooling Cyclone (EU 031)**Associated Items:** EU 031 DDGS Cooling Cyclone

GP 005 Cyclone Monitoring Requirements

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 1.6 lbs/hour	Title I Condition: To avoid major source classification under 40 CFR Section 52.21
Total Particulate Matter: less than or equal to 0.0936 grains/dry standard cubic foot or the allowable concentration at the exhaust flow rate as described in Minn. R. 7011.0735.	Minn. R. 7011.1005, subp. 3(D)
Particulate Matter < 10 micron: less than or equal to 1.6 lbs/hour	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 & Minn. R. 7007.0200
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1005, subp. 3(D)
B. EU 031 OPERATING REQUIREMENTS	hdr
Pressure Drop: greater than or equal to 4 inches of water column and less than or equal to 8 inches of water column for EU 031. See GP 005 for additional EU 031 requirements.	Title I Condition: To avoid major source classification under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2 and Minn. R. 7007.0200
C. TESTING REQUIREMENTS	hdr
Performance Test: due before end of each 36 months starting 01/08/1999 to measure SV 009 PM emissions. The tests shall be conducted at an interval not to exceed 36 months between test dates.	Title I Condition: Emissions testing to avoid major source classification under 40 CFR Section 52.21; Minn. R. 7017.2020, subp. 1 and Minn. R. 7017.2030, subp. 4
Performance Test Pre-test Meeting: due 7 days before each Performance Test	
Performance Test: due before end of each year starting 01/08/1999 measure SV 009 PM10 emissions. The tests shall be conducted at an interval not to exceed 12 months between test dates.	Title I Condition: Emissions testing to avoid major source classification under 40 CFR Section 52.21; 40 CFR Section 70.2 and Minn. R. 7007.0200; Minn. R. 7017.2020, subp. 1 and Minn. R. 7017.2030, subp. 4
Performance Test Pre-test Meeting: due 7 days before each Performance Test	
General Performance Test (PT) Requirements: Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements. PT Notifications (written): due 30 days before each Performance Test PT Plan: due 30 days before each Performance Test PT Pre-test Meeting: due 7 days before each Performance Test PT Report: due 45 days after each Performance Test PT Report - Microfiche: due 105 days after each Performance Test	Minn. R. 7017.2030, subp. 1-4, and Minn. R. 7017.2035, subp. 1 and 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: EU 018 Boiler**Associated Items:** GP 006 NOx Emissions From Fuel Combustion

SV 006 Boiler

What to do	Why to do it
Recordkeeping: Record and maintain records of the amounts of each fuel combusted on a monthly basis for the previous calendar month. These records may consist of fuel meter readings or fuel bills/purchase receipts.	40 CFR Section 60.13(i) to comply with 40 CFR Section 60.48c(g) and (i); Minn. R. 7011.0570

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: EU 034 Boiler**Associated Items:** GP 006 NOx Emissions From Fuel Combustion

SV 010 Boiler

What to do	Why to do it
Recordkeeping: Record and maintain records of the amounts of each fuel combusted on a monthly basis for the previous calendar month. These records may consist of fuel meter readings or fuel bills/purchase receipts.	40 CFR Section 60.13(i) and February 20, 1992, EPA memorandum to meet requirements of 40 CFR Section 60.48c(g) and (i); Minn. R. 7011.0570

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: FS 001 Facility Truck Traffic Fugitive Emissions

What to do	Why to do it
Fugitive Emissions: Do not cause or permit the transporting any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Do not cause or permit a road or a driveway to be constructed, used, repaired, or demolished without applying all such reasonable measures as may be required to prevent particulate matter from becoming airborne.	Minn. R. 7011.0150

TABLE A: LIMITS AND OTHER REQUIREMENTS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Subject Item: FS 002 Grain and DDGS Fugitive Emissions

What to do	Why to do it
Opacity: less than or equal to 5 percent opacity for fugitive emissions from grain unloading, grain or DDGS handling activities, or DDGS railcar loading.	Minn. R. 7011.1005, subp. 3(A)
Opacity: less than or equal to 10 percent opacity for fugitive emissions from DDGS truck loading.	Minn. R. 7011.1005, subp. 3(B)
Clean up commodities spilled on the driveway and other facility property as required to minimize fugitive emissions to a level consistent with RACT (Reasonably Available Control Technology).	Minn. R. 7011.1005, subp. 1(A)

TABLE B: SUBMITTALS

10/08/99

Facility Name: Heartland Corn Products
Permit Number: 14300014 - 002

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

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

Send any application for a permit or permit amendment to:

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

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

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

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

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

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

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

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

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

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

What to send	When to send	Portion of Facility Affected
Notification	due 30 days before Performance Test that will be used to establish an emission factor for NOx when combusting natural gas or propane for GP 006.	GP006
Performance Test Notification (written)	due 30 days before Performance Test to establish an emission factor when combusting natural gas or propane for GP 006. This requirement also includes submittal of a written Performance Test Plan.	GP006
Performance Test Report - Microfiche Copy	due 105 days after Performance Test to establish an emission factor for NOx when combusting natural gas or propane for GP 006.	GP006
Performance Test Report	due 45 days after Performance Test to establish an emission factor for NOx when combusting natural gas or propane for GP 006.	GP006
Testing Frequency Plan	due 60 days after Performance Test for NOx emissions. The plan shall specify a testing frequency using the test data and MPCA guidance. Future performance tests based on year (12-month), 36-month, and 60-month intervals, or as applicable, shall be required on written approval of MPCA per Minn. R. 7017.2020, subp. 1.	GP006

TABLE B: RECURRENT SUBMITTALS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance . The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31.	Total Facility
Compliance Certification	due 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. The report covers all deviations experienced during the calendar year.	Total Facility
Emissions Inventory Report	due 91 days after end of each calendar year following Permit Issuance (April 1). To be submitted on a form approved by the Commissioner.	Total Facility
Performance Test Notification (written)	due 30 days before end of each year starting 01/08/1999 to measure SV 009 PM10 emissions (30 days before each Performance Test). This requirement also includes submittal of a written Performance Test Plan.	SV009
Performance Test Report - Microfiche Copy	due 105 days after end of each year starting 01/08/1999 to measure SV 009 PM10 emissions (105 days after each Performance Test).	SV009
Performance Test Report	due 45 days after end of each year starting 01/08/1999 to measure SV 009 PM10 emissions (45 days after each Performance Test).	SV009
Performance Test Notification (written)	due 30 days before end of each 36 months starting 01/08/1999 to measure SV 004 PM (30 days before each Performance Test). This requirement also includes submittal of a written Performance Test Plan.	SV004
Performance Test Notification (written)	due 30 days before end of each 36 months starting 01/08/1999 to measure SV 004 PM10 emission (30 days before each Performance Test). This requirement also includes submittal of a written Performance Test Plan.	SV004
Performance Test Notification (written)	due 30 days before end of each 36 months starting 01/08/1999 to measure SV 009 PM (30 days before each Performance Test). This requirement also includes submittal of a written Performance Test Plan.	SV009
Performance Test Report - Microfiche Copy	due 105 days after end of each 36 months starting 01/08/1999 to measure SV 004 PM emissions (105 days after each Performance Test).	SV004
Performance Test Report - Microfiche Copy	due 105 days after end of each 36 months starting 01/08/1999 to measure SV 004 PM10 emissions (105 days after each Performance Test).	SV004
Performance Test Report - Microfiche Copy	due 105 days after end of each 36 months starting 01/08/1999 to measure SV 009 PM emissions (105 days after each Performance Test).	SV009
Performance Test Report	due 45 days after end of each 36 months starting 01/08/1999 to measure SV 004 PM (45 days after each Performance Test).	SV004

TABLE B: RECURRENT SUBMITTALS

10/08/99

Facility Name: Heartland Corn Products

Permit Number: 14300014 - 002

Performance Test Report	due 45 days after end of each 36 months starting 01/08/1999 to measure SV 004 PM10 emissions (45 days after each Performance Test).	SV004
Performance Test Report	due 45 days after end of each 36 months starting 01/08/1999 to measure SV 009 PM (45 days after each Performance Test).	SV009
Performance Test Notification (written)	due 30 days before end of each 60 months starting 01/08/1999 to measure SV 003 volatile organic compounds (30 days before each Performance Test). This requirement also includes submittal of a written Performance Test Plan.	SV003
Performance Test Notification (written)	due 30 days before end of each 60 months starting 01/08/1999 to measure SV 005 volatile organic compounds (30 days before each Performance Test). This requirement also includes submittal of a written Performance Test Plan.	SV005
Performance Test Notification (written)	due 30 days before end of each 60 months starting 04/05/1999 to measure SV 004 VOC emissions (30 days before each Performance Test). This requirement also includes submittal of a written Performance Test Plan.	SV004
Performance Test Report - Microfiche Copy	due 105 days after end of each 60 months starting 01/08/1999 to measure SV 003 volatile organic compounds (105 days after each Performance Test).	SV003
Performance Test Report - Microfiche Copy	due 105 days after end of each 60 months starting 01/08/1999 to measure SV 005 volatile organic compounds (105 days after each Performance Test).	SV005
Performance Test Report - Microfiche Copy	due 105 days after end of each 60 months starting 04/05/1999 to measure SV 004 VOC emissions (105 days after each Performance Test).	SV004
Performance Test Report	due 45 days after end of each 60 months starting 01/08/1999 to measure SV 003 volatile organic compounds (45 days after each Performance Test).	SV003
Performance Test Report	due 45 days after end of each 60 months starting 01/08/1999 to measure SV 005 volatile organic compounds (45 days after each Performance Test).	SV005
Performance Test Report	due 45 days after end of each 60 months starting 04/05/1999 to measure SV 004 VOC emissions (45 days after each Performance Test).	SV004

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 14300014-002

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

1. General Information

1.1. Applicant and Stationary Source Location:

Owner/Operator Address and Phone Number	Facility Location (SIC Code: 2869)
Heartland Corn Products PO Box A Winthrop, Minnesota 55396 Ben Brown, General Manager Tim Miller, Plant Manager Phone: (507) 647-5000 Fax: (507) 647-5010	Heartland Corn Products Highway 19 East Winthrop, Sibley County

1.2. Description Of The Facility

This facility produces fuel-grade ethanol and distillers dried grains with solubles (DDGS). Emission sources include corn receiving, storing, handling, and cleaning; steam production (boilers); drying, storage, handling, and shipping of DDGS; fermentation and distillation; storage of ethanol of varying purities at various points in the process; storage of unleaded gasoline (denaturant); and shipping of denatured ethanol. Primary pollutants include particulate matter, particulate matter smaller than 10 microns, oxides of nitrogen, and volatile organic compounds.

1.3 Description of the Activities Allowed By This Permit Action

This permit action:

- allows continued operation of the facility;
- increases the EU 031 (SV 009) DDGS cooling cyclone emission limits for PM/PM₁₀ from 0.42 lb/hr to 1.6 lb/hr;
- increases the DDGS Dryer (SV 004/EU 015) PM₁₀ limit from 7.75 lb/hr to 8.0 lb/hr; and
- decreases the SV 004 PM limit from 7.75 lb/hr to 5.0 lb/hr.

Permit Action Number: 14300014-002

Date: 1/15/2004

The Permittee has requested the cooling cyclone change because the original SV 009 limit of 0.42 lb/hr was determined without considering emissions of condensible particulate matter, even though applicable emissions testing methods measure condensible particulate matter emissions. Based on January 1999 SV 009 performance testing results (using EPA methods 5 and 202) of 1.38 lb/hr and 1.47 lb/hr for PM and PM₁₀, respectively, the Permittee has requested that the limit be increased to 1.6 lb/hr.

The SV 004 PM₁₀ limit was increased to allow the facility to operate the DDGS dryer (EU 015) at production rates up to 110% of the rate during the January 1999 performance testing. As stated in Minn. R. 7017.2025, subp. 3a(B), if a performance test yields emission results that are less than 80% of the applicable limit, then the tested process may operate up to 110% of the tested operating rate. Raising the PM₁₀ limit from 7.75 lb/hr to 8.0 lb/hr results in the tested emission rate being less than 80% of the applicable (8.0 lb/hr) emission limit.

The SV 004 PM limit was decreased from 7.75 lb/hr to 5.0 lb/hr to maintain nonmajor source status under 40 CFR § 52.21. This limit reduction is reasonable because the January 1999 performance test results for SV 004 PM emissions were 3.15 lb/hr.

This permit action requires a major permit amendment because the SV 009 PM/PM₁₀ limits and the SV 004 limits are Title I requirements that restrict facility emissions to less than the major source level defined under 40 CFR § 52.21. The source will remain a nonmajor source under 40 CFR § 52.21, as well as a nonmajor source under 40 CFR pt. 70, after the limits are increased.

No environmental review is required for this permit amendment.

1.4. Facility Emissions:

Table 1. Emissions Changes Associated With the Modification

Pollutant	Potential to Emit from the mod (lb/hr)	Potential to Emit from the mod (TPY)	Emission Increases Authorized with this Permit Action (TPY)	Emission Decreases Authorized with this Permit Action (TPY)	*Other contemporaneous emission increases/decreases (TPY)	Overall Emission Change (TPY)	NSR/ 112(g) Threshold Level (TPY)	NSR/ MACT Review Required (Yes or No)
PM	-1.57	-6.88	NA	6.88	NA	-6.88	100	No
PM ₁₀	1.43	6.26	6.26	NA	NA	6.26	100	No

*Other emission changes during the contemporaneous period as defined by 40 CFR 52.21, 40 CFR 52.24 or 40 CFR 51

Table 2. Total Facility Potential to Emit Summary

Permit Action Number: 14300014-002

Date: 1/15/2004

	PM	PM₁₀	SO₂	NO_x	VOC	CO	Benzene	Tot HAP
Total Facility Limited Potential Emissions*	86.85	67.29	0.45	85.0	85.0	44.85	0.23	0.23
Total Facility Actual Emissions **	32.90	17.87	0.15	33.0	76.70	7.82	NR	NR

*These are based on Table 2 Total Facility PTE Summary from the PER 001 technical support document, plus the increase/decrease in PM/PM₁₀ for EU 031 and SV 004

** 1997 Emission Inventory

NR = Not Reported

Table 3. Facility and Permit Classification

Classification	Major/Affected Source	*Synthetic Minor	*Minor
PSD		PM, PM ₁₀ , VOC, NO _x	SO ₂ , CO, Pb
NAAR	NA	NA	NA
Part 70		PM ₁₀ , VOC, NO _x	SO ₂ , CO, Pb, HAPs

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

2. Regulatory and/or Statutory Basis

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

Permit Action Number: 14300014-002

Date: 1/15/2004

Regulatory Overview of Facility Changes Allowed by this Permit

EU, GP, SV, etc.	Applicable Regulations	Comments
SV 009 (EU 031)	Title I Condition: To avoid major source classification under 40 CFR § 52.21; to avoid major source classification under 40 CFR § 70.2 & Minn. R. 7007.0200; Minn. R. 7011.1005	The Permittee has requested changing the original SV 009 limit of 0.42 lb/hr because the limit was determined without considering emissions of condensible particulate matter, even though applicable emissions testing methods measure condensible particulate matter emissions. Based on January 1999 SV 009 performance testing results (using EPA methods 5 and 202) of 1.38 lb/hr and 1.47 lb/hr for PM and PM ₁₀ , respectively, the Permittee has requested that the limit be increased to 1.6 lb/hr.
SV 004 (EU 015)	Title I Condition: To avoid major source classification under 40 CFR § 52.21; to avoid major source classification under 40 CFR § 70.2 & Minn. R. 7007.0200; Minn. R. 7011.1005; Minn. R. 7017.2025, subp. 3a	<p>The SV 004 PM₁₀ limit was increased to allow the facility to operate the DDGS dryer (EU 015) at production rates up to 110% of the rate during the January 1999 performance testing. per Minn. R. 7017.2025, subp. 3a(B). Raising the PM₁₀ limit from 7.75 lb/hr to 8.0 lb/hr results in the tested emission rate being less than 80% of the applicable (8.0 lb/hr) emission limit.</p> <p>The SV 004 PM limit was decreased from 7.75 lb/hr to 5.0 lb/hr to maintain nonmajor source status under 40 CFR § 52.21. This limit reduction is reasonable and feasible because the January 1999 performance test results for SV 004 PM emissions were 3.15 lb/hr.</p>

3. Additional Information

- Performance test requirements were updated based on testing conducted since issuance of Permit No. 14300014-001

4. Conclusion

Based on the information provided by Heartland Corn Products, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 14300014-002 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Permit Writer: Marshall Cole; Yolanda Hernandez

Permit Action Number: 14300014-002

Date: 1/15/2004