

**AIR EMISSION PERMIT NO. 01300017-003**

**IS ISSUED TO**

**Williams Pipe Line Company**

Williams Pipe Line Company - Mankato  
Junction Highway 169 & 68  
Mankato, Blue Earth County, MN 56001

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	4/8/96
Major Amendment	12/28/2001

This permit authorizes the Permittee to operate and construct 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 Minor PSD/NSR

**Issue Date:** April 16, 1998      Major Amendment: July 15, 2003

**Expiration:** Permit does not expire.  
All Title I Conditions do not expire.

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Ann M. Foss  
Major Facilities Section Manager  
Major and Remediation Division

for Sheryl A. Corrigan  
Commissioner  
Minnesota Pollution Control Agency

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**NOTICE TO THE PERMITTEE:**

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

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

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

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

**PERMIT SHIELD:**

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to 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:**

Williams Pipe Line Company owns and operates this bulk fuels storage and truck loading terminal in Mankato, Minnesota. The facility consists of a truck loading rack and petroleum product storage tanks. A flare is used to control vapors from the truck loading rack. A soil vapor extraction system is also located on site.

The facility has been issued a State total facility permit. The facility also had federally-enforceable permit conditions (specifically the use of a flare) to avoid major source classification under the National Emission Standards for Hazardous Air Pollutants program. 40 CFR § 63.

**AMENDMENT DESCRIPTION:**

This permit authorizes the operation of a second air sparge and soil vapor extraction system (for Area 2) (CE 002). This system will include both Systems II and II-E. This emission unit (EU 003) will be controlled by an oxidizer. The oxidizer will be able to operate in both thermal and catalytic modes. Federally enforceable permit conditions on the oxidizer will allow the facility to continue to avoid major source classification under the Prevention of Significant Deterioration (PSD) program. 40 CFR § 52.21.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

07/15/03

Facility Name: Williams Pipe Line Co - Mankato

Permit Number: 01300017 - 003

**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**

<b>What to do</b>	<b>Why to do it</b>
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
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)
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
Shutdowns: Notify the Commissioner at least 24 hours in advance of shutdown of any process or control equipment if the shutdown would cause an increase in the emission of air contaminants. 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. 1
Breakdowns: Notify the Commissioner immediately of a breakdown of more than one hour duration of any process or control equipment if the breakdown causes an increase in the emission of air contaminants, or as required by Minn. R. 7019.1000 as amended. 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
Oral Notification of Deviations Endangering Human Health or the Environment: Within 24 hours of discovery, orally notify the Commissioner of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7007.0800, subp. 6(A)
Discovery of Deviations Endangering Human Health or the Environment Report (written): within two working days after discovery of deviation, submit a written description of any deviation endangering human health or the environment to the Commissioner. 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. 7007.0800, subp. 6(A)
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
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.	Minn. R. 7030.0010 - 7030.0080
Application for Permit Amendment: If you need a permit amendment, submit 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)

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

07/15/03

Facility Name: Williams Pipe Line Co - Mankato

Permit Number: 01300017 - 003

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)
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)
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
The Permittee shall comply with the general conditions.	Minn. R. 7007.0800, subp. 16

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

07/15/03

Facility Name: Williams Pipe Line Co - Mankato

Permit Number: 01300017 - 003

**Subject Item:** SV 001**Associated Items:** EU 001 Truck Loading Rack

What to do	Why to do it
Immediately before the performance test required by 40 CFR Sections 60.503 and 60.8, use Method 21 to monitor for leakage of vapor from all potential sources in the terminal's vapor collection system equipment while a gasoline tank truck is being loaded. Repair all leaks with readings of 10,000 ppm (as methane) or greater before conducting the performance test.	40 CFR Section 60.503(b), Minn. R. 7011.1550
Performance Test: due 180 days after Initial Startup or within 60 days of reaching the maximum production rate at which the facility will be operated, whichever is sooner, to demonstrate compliance with the standards in 40 CFR section 60.502(b) and (h).	40 CFR Section 60.503 and 60.8, Minn. R. 7011.1550
Performance Test Pre-test Meeting: due 7 days before Performance Test for total organic compounds.	Minn. R. 7017.2030, subp. 4

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

07/15/03

Facility Name: Williams Pipe Line Co - Mankato

Permit Number: 01300017 - 003

**Subject Item:** EU 001 Truck Loading Rack**Associated Items:** CE 001 Flaring

SV 001

What to do	Why to do it
Total Organic Compounds: less than or equal to 35 milligrams/liter of gasoline loaded.	40 CFR Section 60.502(b), Minn. R. 7011.1550
<p>Loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline trucks using the following procedures. The Permittee shall:</p> <ol style="list-style-type: none"> <li>1. Obtain the vapor tightness documentation described in Section 60.505(b) for each gasoline tank truck which is to be loaded at the facility.</li> <li>2. Require the tank identification number to be recorded as each gasoline tank truck is loaded at the facility.</li> <li>3. Cross-check each tank identification number with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded.</li> <li>4. Notify the owner or operator of each nonvapor-tight gasoline tank truck loaded at the facility within 3 weeks after the loading has occurred.</li> <li>5. Take steps assuring that the nonvapor-tight gasoline tank truck will not be reloaded at the facility until vapor tightness documentation for that tank is obtained.</li> <li>6. Alternate procedures may be used upon application to, and approval by, the Administrator.</li> </ol>	40 CFR Section 60.502(e), Minn. R. 7011.1550
The Permittee shall act to assure that loadings of gasoline tank trucks at the facility are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system.	40 CFR Section 60.502(f), Minn. R. 7011.1550
The Permittee shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. This includes training drivers in the hookup procedures and posting visible reminder signs at the affected loading racks.	40 CFR Section 60.502(g), Minn. R. 7011.1550
A pressure measurement device capable of measuring up to 500 mm of water gauge pressure with +/- 2.5 mm of water precision, shall be calibrated and installed on the terminal's vapor collection system at a pressure tap located as close as possible to the connection with the gasoline tank truck.	40 CFR Section 60.503(d)(1), Minn. R. 7011.1550
The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. This level is not to be exceeded when measured by the procedures specified in 40 CFR Section 60.503(d).	40 CFR Section 60.502(h), Minn. R. 7011.1550
No pressure-vacuum vent in the bulk gasoline terminal's vapor collection system shall begin to open at a system pressure less than 4,500 pascals (450 mm of water.)	40 CFR Section 60.502(i), Minn. R. 7011.1550
Inspection: Each calendar month, the vapor collection system, the vapor processing system, and each loading rack handling gasoline shall be inspected during the loading of gasoline tank trucks for total organic compounds liquid or vapor leaks. For purposes of this requirement, detection methods incorporating sight, sound, or smell are acceptable.	40 CFR Section 60.502(j), Minn. R. 7011.1550
Recordkeeping and Repair: Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected.	40 CFR Section 60.502(j), Minn. R. 7011.1550
The tank truck vapor tightness documentation shall be kept on file at the terminal in a permanent form available for inspection.	40 CFR Section 60.505(a), Minn. R. 7011.1550
The documentation file for each gasoline tank truck shall be updated at least once per year to reflect current test results as determined by Method 27.	40 CFR Section 60.505(b), Minn. R. 7011.1550
<p>A record of each monthly leak inspection shall be kept on file at the terminal for at least 2 years and shall include, at a minimum:</p> <ol style="list-style-type: none"> <li>1. Date of inspection</li> <li>2. Findings (no leaks, or nature and severity of leaks)</li> <li>3. Leak determination method</li> <li>4. Corrective action (date each leak repaired, reasons for repair interval &gt;15 days)</li> <li>5. Inspector name and signature</li> </ol>	40 CFR Section 60.505(c), Minn. R. 7011.1550
The permittee shall keep documentation of all notifications required under Section 60.502(e)(4) on file at the terminal for at least 2 years.	40 CFR Section 60.505(d), Minn. R. 7011.1550
The Permittee shall keep records of all replacements or additions of components performed on an existing vapor processing system for at least 3 years.	40 CFR Section 60.505(f), Minn. R. 7011.1550
The existing loading rack will be shut down and its removal will start, when the new rack attains normal operation. Removal must be completed within six months of initial startup of the new rack.	Minn. R. 7007.0800, subp. 2



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

07/15/03

Facility Name: Williams Pipe Line Co - Mankato  
Permit Number: 01300017 - 003

Performance Test: due before end of each calendar 60 months starting 04/16/1998 in accordance with 40 CFR 60.503.	Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before Performance Test	Minn. R. 7017.2030, subp. 4

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

07/15/03

Facility Name: Williams Pipe Line Co - Mankato

Permit Number: 01300017 - 003

**Subject Item:** CE 001 Flaring**Associated Items:** EU 001 Truck Loading Rack

FS 001 Gasoline Service - Valves, Flanges, Pumps, Connectors

What to do	Why to do it
Flares shall be operated at all times when emissions may be vented to them.	Title I Condition: Limit to avoid classification as major source under 40 CFR Section 52.21; to avoid major source classification under 40 CFR Section 70.2; and to avoid major source classification under 40 CFR Section 63.2
Flares shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using an ultraviolet sensor or any other equivalent device to detect the presence of a flame.	Title I Condition: Monitoring of limit used to avoid major source classification under 40 CFR Section 52.21; 40 CFR Section 70.2; and 40 CFR Section 63.2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

07/15/03

Facility Name: Williams Pipe Line Co - Mankato

Permit Number: 01300017 - 003

**Subject Item:** CE 002 Catalytic Afterburner**Associated Items:** EU 003 Air Sparging/Soil Vapor Extraction, System II and II-E

What to do	Why to do it
The Permittee shall operate and maintain the oxidizer equipment any time the remediation equipment is in operation.	Minn. R. 7007.0800, subp. 2
Operation and Maintenance of Oxidizers: The Permittee shall operate and maintain the oxidizer in accordance with the Operation and Maintenance (O & M) Plan. The Permittee shall keep copies of the O & M Plan available onsite for use by employees and MPCA staff.	Minn. R. 7007.0800, subp. 2
Alternative Operating Scenarios: The air pollution control equipment used by the Permittee can operate in two different modes - either as a thermal oxidizer or as a catalytic oxidizer. The terms and conditions for each scenario are listed below and includes that the Permittee must record in a log a record of the scenario under which it is operating.	Minn. R. 7007.0800, subps. 5 and 11
Daily Recordkeeping Log: The Permittee must record daily, in a log, the hours of operation that the thermal oxidizer or catalytic oxidizer is in use. The log must provide a unique system for identifying each mode of operation (thermal or catalytic).	Minn. R. 7007.0800, subps. 5 and 11
THERMAL OXIDIZER REQUIREMENTS (Scenario 1)	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.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21
Temperature: Greater than or equal to 1350 degrees F (absolute minimum) at the Combustion Chamber unless a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average temperature recorded during the most recent MPCA approved performance test where compliance for VOC emissions was demonstrated. If the temperature drops below the minimum temperature limit, the VOC used during that time shall be considered uncontrolled until the minimum temperature limit is once again achieved. This shall be reported as a deviation.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21
The Permittee shall maintain a hard copy readout or computer disk file of the temperature readings for the combustion chamber. Temperature readings will be recorded, at least, once every 15 minutes during operation.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21
Daily Monitoring: The Permittee shall check the temperature recording device, at least, once each operating day to verify that it is working and recording properly. The Permittee may check the device either visually or electronically using telemetry.	Minn. R. 7007.0800, subps. 4 and 5
Monitoring Equipment: The Permittee shall install and maintain thermocouples to conduct temperature monitoring required by this permit. The monitoring equipment must be installed, in use, and properly maintained whenever operation of the monitored control equipment is required.	Minn. R. 7007.0800, subp. 4
The Permittee shall maintain and operate a thermocouple monitoring device that continuously indicates and records the combustion chamber temperature of the thermal oxidizer, at least, once every 15 minutes. The monitoring device shall have a margin of error less than the greater of +/- 0.75 percent of the temperature being measured or +/- 2.5 degrees Celsius.	Minn. R. 7007.0800, subps. 4 and 5
Quarterly Inspections: At least once per calendar quarter, the Permittee shall inspect the control equipment internal and external system components, including but not limited to the refractory, heat exchanger, and electrical systems. The Permittee shall maintain a written record of the inspection and any corrective actions taken resulting from the inspection.	Minn. R. 7007.0800, subps. 4, 5, and 14
Annual Calibration: The Permittee shall calibrate the temperature monitor at least annually and shall maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subps. 4, 5, and 14
Corrective Actions: If the temperature is below the minimum specified by this permit or if the thermal oxidizer or any of its components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall return the temperature to at least the permitted minimum and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the thermal oxidizer. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subp. 4, 5, and 14
CATALYTIC OXIDIZER REQUIREMENTS (Scenario 2)	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.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

07/15/03

Facility Name: Williams Pipe Line Co - Mankato

Permit Number: 01300017 - 003

Temperature: Greater than or equal to 630 degrees F (absolute minimum) at the inlet unless a new minimum is set pursuant to Minn. R. 7017.2025, subp. 3, based on the average temperature recorded during the most recent MPCA approved performance test where compliance for VOC emissions was demonstrated. If the temperature drops below the minimum temperature limit, the VOC used during that time shall be considered uncontrolled until the minimum temperature limit is once again achieved. This shall be reported as a deviation.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21
Catalyst Reactivity: The Permittee shall verify the catalyst reactivity per the manufacturer's specifications and shall maintain a record of the results.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21
The Permittee shall maintain either a hard copy readout or computer disk file of the inlet and outlet temperature readings. Temperature readings will be recorded, at least, once every 15 minutes during operation.	Title I Condition: Limit taken to avoid classification as a major source and modification under 40 CFR Section 52.21
Daily Monitoring: The Permittee shall check the temperature recording device, at least, once each operating day to verify that it is working and recording properly. The Permittee may check the device either visually or electronically using telemetry.	Minn. R. 7007.0800, subps. 4 and 5
Monitoring Equipment: The Permittee shall install and maintain thermocouples for measuring and recording the temperature as required by this permit. The monitoring equipment must be installed, in use, and properly maintained when operation of the monitored control equipment is required.	Minn. R. 7011.0075, subp. 3
The Permittee shall maintain and operate a thermocouple monitoring device that continuously indicates and records both the inlet and outlet temperatures of the catalytic oxidizer, at least, once every 15 minutes. The monitoring device shall have a margin of error less than the greater of +/- 0.75 percent of the temperature being measured or +/- 2.5 degrees Celsius.	Minn. R. 7007.0800, subps. 4 and 5
Monthly Monitoring: At least once each month during normal operation, the Permittee shall record the temperature rise across the catalyst (outlet temp. - inlet temp.) while the process is running. If it is determined that the catalyst reactivity has been impaired, by comparison of the observed temperature rise to the past temperature rise records, the Permittee shall follow the corrective actions in the Operation and Maintenance Plan. The Permittee shall maintain written records of the monitoring and any corrective actions taken.	Minn. R. 7007.0800, subps. 4, 5, and 14
Quarterly Monitoring: At least once per calendar quarter, the Permittee shall monitor the vapor influent and effluent. Additional vapor discharges will be collected after any modifications that affect the control device operations. Within 30 days of collecting any quarterly sample, the Permittee shall obtain results. A confirmation sample will be taken within 2 additional days, if the initial quarterly sample indicates that the system is not achieving at least 95% control efficiency. If the confirmation sample confirms that the system is not achieving a 95 % control efficiency, the Permittee shall shut down the system and take corrective actions as soon as possible.	Minn. R. 7007.0800, subps. 4, 5, and 14
Annual Calibration: The Permittee shall calibrate the temperature monitor at least annually and shall maintain a written record of the calibration and any action resulting from the calibration.	Minn. R. 7007.0800, subps. 4, 5, and 14
Corrective Actions: If the temperature is below the minimum specified by this permit or if the catalytic oxidizer or any of its components are found during the inspections to need repair, the Permittee shall take corrective action as soon as possible. Corrective actions shall return the temperature to at least the permitted minimum and/or include completion of necessary repairs identified during the inspection, as applicable. Corrective actions include, but are not limited to, those outlined in the O & M Plan for the catalytic oxidizer. The Permittee shall keep a record of the type and date of any corrective action taken.	Minn. R. 7007.0800, subp. 4, 5, and 14

## TABLE B: SUBMITTALS

07/15/03

Facility Name: Williams Pipe Line Co - Mankato

Permit Number: 01300017 - 003

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**

07/15/03

Facility Name: Williams Pipe Line Co - Mankato

Permit Number: 01300017 - 003

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup . Submit the name and number of each unit and the actual date of initial startup each unit.	Total Facility
Notification of the Anticipated Date of Initial Startup	due 30 days before Anticipated Date of Initial Startup . Submit the name and number of each unit and the anticipated date of initial startup each unit.	Total Facility
Notification of the Date Construction Began	due 30 days after Start Of Construction . Submit the name and number of each unit and the date construction of each unit began.	Total Facility
Notification of the date of Equipment Removal/Dismantlement	due 15 days after Equipment Removal and/or Dismantlement . Submit the name and number of each unit and the date the unit was removed and/or dismantled.	Total Facility
Performance Test Notification (written)	due 30 days before Performance Test	EU001
Performance Test Notification (written)	due 30 days before Performance Test for total organic compounds.	SV001
Performance Test Plan	due 30 days before Performance Test	EU001
Performance Test Plan	due 30 days before Performance Test for total organic compounds.	SV001
Performance Test Report - Microfiche Copy	due 105 days after Performance Test	EU001
Performance Test Report - Microfiche Copy	due 105 days after Performance Test for total organic compounds.	SV001
Performance Test Report	due 45 days after Performance Test	EU001
Performance Test Report	due 45 days after Performance Test for total organic compounds.	SV001

**TABLE B: RECURRENT SUBMITTALS**

07/15/03

Facility Name: Williams Pipe Line Co - Mankato

Permit Number: 01300017 - 003

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 05/06/1997 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 starting 05/06/1997 (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 starting 05/06/1997 (April 1). To be submitted on a form approved by the Commissioner.	Total Facility

**TECHNICAL SUPPORT DOCUMENT**  
**For**  
**DRAFT AIR EMISSION PERMIT NO. 01300017-003**  
**(AQD #1858C)**

This technical support document is for all the interested parties of the draft permit and to meet the requirements that have been set forth by 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 draft permit.

**1. General Information**

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

Applicant/Address	Stationary Source/Address (SIC Code: 5171)
Williams Energy Partners L.P. – Mankato Terminal	Junction of Hwy. 169 & 68
P.O. Box 21889	Route 9, Box 137
Tulsa, Oklahoma 74121-1899	Mankato, MN 56001

**1.2. Description Of The Permit Action**

**1.2.1 Permit Action** - Issuance of a state major amendment to a State total facility operating permit for the facility. This is a result of an increase of emissions due to the addition of an air sparge and soil vapor extraction (AS/SVE) system II and II-E (EU 003). With Title I Conditions taken on the use of an oxidizer control equipment, the permit remains a State total facility operating permit.

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

Williams Pipe Line Company has already installed and been operating an air sparge and soil vapor extraction (AS/SVE) system to remove organic compounds from the ground water and soil vapor space. The AS/SVE system installation was completed in December 1999. The AS/SVE system was installed under the direction of the Minnesota Pollution Control Agency Metro District Remediation Section. Williams Pipe Line began operating the AS/SVE system on January 25, 2000. Williams Pipe Line shut down the AS/SVE system on July 26, 2001, and has kept the system shut down since then. The purpose of this amendment is to authorize the operation of this system in the facility's air emission permit.

Based on additional investigation in the area, the Permittee will expand System II, in 2003 to respond to newly identified areas of free product. The existing System II and the proposed expansion (II-E) together compromise EU 003.



**Table 1. Total Facility Potential to Emit (PTE) Summary and Attainment Status:**

Pollutant	PTE (tons/year)					(tons/ year)	Attainment ?
	EU 1 Rack	EU 2 Clean- up	EU 3 Clean- up	Tanks ***	Fugitive	Sum	
Particulate Matter (PM)	0	0	0	0	0	0	Not Applied
Particulate Matter less than 10 micron (PM <sub>10</sub> )	0	0	0	0	0	0	Yes
Sulfur Dioxide (SO <sub>2</sub> )	0	0	0	0	0	0	Yes
Nitrogen Oxides (NO <sub>x</sub> )	3.684	0	1.533	0	0	5.217	Yes
Volatile Organic Compounds (VOC)	32.21	10.95	8.661*	32.03	0.698	84.549	Yes
Carbon Monoxide (CO)	9.209	0	3.832	0	0	13.041	Yes
Lead	0	0	0	0	0	0	Yes
Hazardous Air Pollutants (combined)	1.546	0.526	0.443	1.665	0.034	4.214	Not Applied
Benzene	0.290	0.04	0.060*	0.289	0.006	0.685	Not Applied
Ethyl Benzene	0.032	0.011	0.014*	0.032	0.001	0.09	Not Applied
Hexane	0.515	0.175	0.139**	0.512	0.011	1.352	Not Applied
Toluene	0.419	0.142	0.091*	0.416	0.009	1.077	Not Applied
2,2,4 Trimethylpentane	0.258	0.088	0.069**	0.256	0.006	0.677	Not Applied
Xylenes	0.161	0.055	0.071*	0.160	0.003	0.45	Not Applied

Notes: \* = actual sample data available and used multiplied times 95% control efficiency

\*\* = derived from NESHAP emission factors multiplied times 95% control efficiency

\*\*\* = changes due to using Tanks Version 4 instead of 2.

**Table 2. Permit Action Classification**

Classification (put x in appropriate box)	Major/Affected Source <sup>1</sup>	Synthetic Minor	Minor
PSD (VOC)		X	
NAAR (N/A)	(N/A)		
Part 70 Permit Program (VOC)		X	

<sup>1</sup> 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**

### **2.1 Applicability of Federal Regulations**

#### **Part 52.21 - Major Source Definition**

Williams Pipeline Company – Mankato Terminal is among the 28 industrial categories listed in the Prevention of Significant Deterioration (PSD) rules that are classified as major sources, if the potential-to-emit (PTE) is equal to or greater than 100 tons per year of any single regulated pollutant. In addition, the facility is located in an area that is in attainment or unclassified for all criteria pollutants.

Prior to the addition of the AS/SVE system, Williams Pipe Line Company – Mankato Terminal had a volatile organic compounds (VOC) PTE of 74.46 tons per year (tpy). If uncontrolled, the second AS/SVE system would have added an additional 90.72 tpy of VOCs. The Permittee chose to control the emissions to remain below the 100 tpy PSD threshold. 40 CFR § 52.21. Title I Conditions were applied to the use of the oxidizer control equipment (EU 003). This allows the Permittee to avoid major source designation.

Williams Pipe Line submitted U.S. Environmental Protection Agency (EPA), Region IV information that the facility's PSD threshold should be 250 tpy. This information was forwarded to EPA, Region V. Region V did not verbally concur with the 250 tpy PSD threshold. Region V verbally provided that the PSD threshold is 100 tpy. Region V provided the MPCA with background information supporting their decision. Permit support documents were gathered from facilities in Colorado, Georgia, and Washington. All three of these permits were apparently written after the Region IV memo. All three of these permits appeared to have used the 100 tpy PSD threshold.

**Part 60 NSPS - *does not apply***

#### **Part 63 NESHAPs**

NESHAPs do not apply to facilities with Hazardous Air Pollutant (HAP) emissions to less than 10 tpy for any single HAP and less than 25 tpy for combined HAPs.

### **2.2 Applicability of State Regulations**

#### **Minnesota Regulations**

The basis of the 95% control efficiency is the Minn. Control Equipment Rule.

### **State Operating Permit**

With the addition of the controlled AS/SVE system, the facility's VOC PTE remains below 100 tpy. Hence, the facility maintains its State Operating permit.

### **Environmental Review**

An Environmental Assessment Worksheet (EAW) or an Environmental Impact Statement (EIS) had not been completed for this project. Environmental review is not required, as the AS/SVE addition's VOC PTE emissions, will be below 100 tons per year.

### **3. Technical Information/Additional Discussion**

- a) The AS/SVE unit emits VOCs/HAPs only. It is not a source of PM emissions.
- b) For System II, the 90.72 tpy PTE is based on actual sampling data collected between January 25, 2000, through June 13, 2001. An average value was taken of the samples. This resulted in the 90.72 tpy VOC PTE (uncontrolled). The PTE for System II-E was based on an estimated concentration and air flow.
- c) The soil vapor extraction unit was first operated on January 25, 2000. The current maximum potential to emit is 90.72 tpy (uncontrolled). This is considered a conservative number, as the concentration of VOC-containing materials in the ground water and soil should continue to decrease. Data on the emission rate is attached.
- d) The Permittee also recalculated the potential tank emissions using TANKS version 4. The Permittee last calculated the potential tank emission for the Title V application using TANKS 2. The Permittee used the same throughput values, tank components, and tank contents for the re-calculation. Using TANKS 4, the increased estimated potential tank emissions were 1.429 tons of VOCs per year. Potential HAP emissions increased proportionately. The summary PTE from the TANKS 4 emissions are attached.
- e) Most of HAP emissions are based on actual sample data available and used (benzene, ethyl benzene, toluene, and xylene). The other HAPs (2,2,4 Trimethylpentane, hexane) are determined from the vapor profile of normal gasoline as stated in the loading rack section. This vapor profile is as follows:

*Gasoline Distribution Industry (Stage 1) - Background Information for Proposed NESHAP*

The vapor profile of normal gasoline is:

<u>Pollutant</u>	<u>HAP to VOC Ratio</u>
Hexane	1.6
Benzene	0.9
Toluene	1.3
2,2,4 Trimethylpentane	0.8
Xylenes	0.5
Ethylbenzene	0.1
Total HAPs (not a sum)	4.8

- f) The control device (CE 002) utilizes the 95% control efficiency provided in the Minnesota Control Efficiency Rule. This is, however, a Title I Condition to avoid PSD designation. The control device (CE 002) will not record temperature continuously. It does monitor temperature continuously, and will shut down the system if the temperature is not within parameters. It will record the temperature electronically every 15 minutes. This meets the requirements of the Minnesota Control Efficiency Rule. But the basis of the requirement is a Title I Condition.
- g) As provided by the Permittee, the catalyst bed on this device (CE 002) is very small in comparison to the beds often found on control devices for large industrial processes. The bed on this device is not set up for sample collection. The Permittee proposed and plans to collect vapor discharge samples once per quarter. And the device will shut down if the temperatures are not adequate. In addition, the Permittee provides that it would simply be less expensive to replace the catalyst bed than to collect and analyze a sample. The manufacturer rates this device for 5 to 7 years of continuous operation with the original catalyst. Accordingly, the catalyst reactivity is to follow the manufacturer's specifications and test destruction efficiency quarterly, in lieu of a catalyst sampling protocol.

### 3. Conclusion

Based on the information provided by Williams Pipeline Company, the MPCA has reasonable assurance that the proposed modification and operation of the emission facility, as described in the Air Emission Permit No. 01300017-003 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

<u>Attachments:</u>	<u>Need further information?</u>
1. Williams Pipe Line Co. Sampling and Emission Calculation Summary 2. Williams Pipe Line Co. TANKS 4 emissions Summary	Permit Engineer: Bruce Braaten Telephone No.: (507)281-7762