

AIR EMISSION PERMIT NO. 04700034- 002

IS ISSUED TO

Williams Pipe Line Company

WILLIAMS PIPE LINE COMPANY - ALBERT LEA

County Road 5
Glenville, Freeborn County, MN 56036

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	Issuance Date	Action Number
Total Facility Operating Permit	06/19/1996	June 27, 2002	001
Minor Amendment	04/09/2004	See below	002

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

Permit Type: Federal; Pt 70/NSR True Minor

Issue Date: September 14, 2004

Expiration: June 27, 2007

All Title I Conditions do not expire.

Ann M. Foss
Major Facilities Section Manager
Majors 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 the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

Williams Pipeline Company operates an interstate transportation pipeline station. The facility is unmanned. The existing facility has 1 product storage tank. The station is equipped with two dual-fuel diesel units and operates 24 hours per day, 365 days per year. The main source of air emissions are combustion products, mainly Nitrogen Oxides (NO_x) and carbon monoxide. It is a major source under 40 CFR pt. 70 due to NO_x emissions. The facility also operates a soil remediation system which is a source of volatile organic compounds and hazardous air pollutants emissions.

AMENDMENT (-002) DESCRIPTION:

An increase in the efficiency of the existing dual-phase extraction, soil vapor and groundwater remediation system has been determined to be needed. This system removes VOC from the groundwater and soil vapor space. This system is identified as EU 004. To improve operational efficiency, the Permittee is authorized to change the mode of operation from single point-by-point extraction to simultaneous extraction of all points.

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/14/04

Facility Name: Williams Pipe Line Co - Albert Lea

Permit Number: 04700034 - 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
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and shall include a preventative maintenance program for that equipment, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment, and the records kept to demonstrate plan implementation.	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
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
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
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 7019.1000, subp. 1
Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.	Minn. R. 7019.1000, subp. 4
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)

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/14/04

Facility Name: Williams Pipe Line Co - Albert Lea

Permit Number: 04700034 - 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
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500
Extension Requests: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).	Minn. R. 7007.1400, subp. 1(H)
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350 subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007.0800, subp. 5(B)
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 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)
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
Emission Inventory Report: due 91 days after end of each calendar year following permit issuance (April 1). To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3010
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/14/04

Facility Name: Williams Pipe Line Co - Albert Lea

Permit Number: 04700034 - 002

Subject Item: EU 001 Engine 3**Associated Items:** SV 001 Engine 2

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input (potential to emit is 0.04 lb/MMBtu based upon equipment design)	Minn. R. 7011.2300, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

09/14/04

Facility Name: Williams Pipe Line Co - Albert Lea

Permit Number: 04700034 - 002

Subject Item: EU 002 Engine 4**Associated Items:** SV 002 Engine 3

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input (potential to emit is 0.04 lb/MMBtu based upon equipment design)	Minn. R. 7011.2300, subp. 2

TABLE B: SUBMITTALS

09/14/04

Facility Name: Williams Pipe Line Co - Albert Lea
Permit Number: 04700034 - 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

09/14/04

Facility Name: Williams Pipe Line Co - Albert Lea

Permit Number: 04700034 - 002

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Computer Dispersion Modeling Information	due 1,096 days after 06/27/2002. Submit modeling data as specified in MPCA guidance for Modeling Information Requests (for pollutant). This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Total Facility
Computer Dispersion Modeling Results	due 1,095 days after Permit Issuance (-002) for NOx. To be submitted after the MPCA has reviewed and approved the modeling protocol. The submittal should adhere to MPCA modeling guidance for Title V air dispersion modeling analyses. This is a state-only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Total Facility

TABLE B: RECURRENT SUBMITTALS

09/14/04

Facility Name: Williams Pipe Line Co - Albert Lea

Permit Number: 04700034 - 002

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 06/27/2002 . The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 30 days after end of each calendar year starting 06/27/2002 (for the previous calendar year). To be submitted on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 04700034-002

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

1. General Information

1.1. Applicant and Stationary Source Location:

Applicant/Address	Stationary Source/Address (SIC Code: 4613)
Magellan Midstream Partners One Williams Center P.O. Box 22186 Tulsa, OK 74121-2186	Magellan – Albert Lea County Road 5 Glenville Freeborn County
Contact: Mr. Ryan Bowers Phone: (918) 573-3106	

1.2. Description of the Facility

Williams Pipeline Company operates an interstate transportation pipeline station. The facility is unmanned. The existing facility has 1 product storage tank. The station is equipped with two duel-fuel diesel units and operates 24 hours per day, 365 days per year. The main source of air emissions are combustion products, mainly NO_x and CO. The facility also operates a soil remediation system which is a source of VOC and HAP emissions.

The facility has potential NO_x emissions which exceed 100 tpy. They are not one of the 28 listed source categories for NSR. They are considered a major source under 40 CFR Part 70.

1.3 Description of the Activities Allowed by this Permit Action

The Permittee and the MPCA determined a need to increase the efficiency of the existing dual-phase extraction, soil vapor and groundwater remediation system. This system removes VOC from the groundwater and soil vapor space. This system is identified as EU 004. To improve operational efficiency, the Permittee proposes to change the mode of operation from single point-by-point extraction to simultaneous extraction of all points.

This permit action will be a state minor amendment.

1.4 Description of Permitting History

Table 1.

Permit Number and Issuance Date	Action Authorized
	This facility has never been issued a total facility permit.
8/17/93 application	Permit Application Form A. Application for permit for existing facility. The engines and tank were installed circa 1946.
04700034-001 (6/27/02)	Part 70 Operating Permit

1.5 Facility Emissions:

Table 2. Non-Title I Emissions Increase Summary

Pollutant	After Change (lb/hr)	Before Change (lb/hr)	Net Change (lb/hr)	Minor and Moderate Amendment Thresholds (lb/hr < or ≥)	Type of Amendment (Minor or Moderate)
PM ₁₀			-	3.42	-
NO _x			-	9.13	-
SO ₂			-	9.13	-
CO			-	22.80	-
VOC	7.03	0.89	6.14	9.13	minor
Lead			-	0.11	-

Table 3. Total Facility Potential to Emit Summary:

EU #	SV #	Emission Unit Description	PM tpy	PM ₁₀ tpy	SO ₂ Tpy	NO _x tpy	CO tpy	VOC tpy	Pb tpy	Single HAP Tpy	All HAPs tpy
001	001	DF Engine No. 1	-	-	0.634	85.147	35.48	6.39	-	-	-
002	002	DF Engine No. 2	-	-	0.634	85.147	35.48	6.39	-	-	-
FS 1		Pump-Seal Emissions, flange and valve emissions	-	-	-	-	-	1.16	-	-	-
004		Soil Remediation	-	-	-	-	-	30.8	-	0.49	1.60
Total Facility Limited Potential Emissions			0	0	1.27	170.29	70.96	44.74	-	-	-
Total Facility Actual Emissions*			4.56	4.15	1.45	37.31	15.54	4.89	-	-	-

*From 1999 Emission Inventory (have since updated PM emission factors).

Insignificant Activity

TK 1	I/A	Fuel-Oil Tank	-	--	-	-	-	0.01	-	-	-
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Table 4. Facility Classification

Classification (put x in appropriate box)	Major/Affected Source	*Synthetic Minor	*Minor
PSD (list pollutant)			All
NAAR (list pollutant)			X
Part 70 Permit Program (list pollutant)	NO _x		All others

2. Regulatory and/or Statutory Basis

New Source Review

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

Part 70 Permit Program

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

New Source Performance Standards (NSPS)

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

National Emission Standards for Hazardous Air Pollutants (NESHAP)

No NESHAPs apply.

Minnesota State Rules

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

- Minn. R. 7011.2300 Standards of Performance for Stationary Internal Combustion Engines

Table 5. Regulatory Overview of Units

EU, GP, or SV	Applicable Regulations	Comments:
EU 001	Minn. R. 7011.2300	Standards of Performance for Stationary Internal Combustion Engines (opacity and SO ₂)
EU 002	Minn. R. 7011.2300	Standards of Performance for Stationary Internal Combustion Engines (opacity and SO ₂)

3. Technical Information

This facility does not have a total storage capacity exceeding 300,000 barrels.

No Additional Requirements

There are no applicable requirements for this system (EU 004), as VOC/HAP emissions are well below any threshold, and there are no PM emissions associated with this system. In addition, no new requirements are triggered for EU 004. Hence, the overall permit has not changed.

Soil Remediation System

A dual-phase extraction system is located at this facility for capturing gasoline and diesel product from the soil. Emissions from this unit are VOCs, which contain HAPs. There is a water treatment system associated with this system. Since about 2000, it has been operating. The Permittee tracks the hours of operation and take quarterly bag samples for laboratory determination of BTEX (benzene, toluene, ethylene and xylene) and other gasoline organics. The Permittee uses a Photo Ionization Detector (PID) monthly to measure for aromatic hydrocarbons. Actuals are based on the average of the quarterly samples.

The emissions should continue to decrease as the system is operated, until the unit is shut down.

As for the current amendment, the Permittee has provided, in part:

On March 1, 2004, MPC contractors field screened every extraction well in the system. The screening results provided an indication of an approximate VOC concentration. Field screening results identified EW-13 as the extraction well with the highest VOC emissions, with a PID reading of 750 ppmv. The laboratory report, for EW-13, indicated a concentration of total petroleum hydrocarbons, as gasoline of 25,000 ug/l. This concentration is unrealistically high because the proposed new method of operation is to extract VOC from all extraction points simultaneously. Nevertheless, MPCA proposes to use this concentration to calculate the theoretical maximum PTE.

The oil-sealed liquid-ring vacuum pump that draws vapors from the extraction wells can generate a maximum sustained flow rate of 150 cfm. However, at such a high flow the effective applied vacuum would not efficiently mobilize hydrocarbon vapor or extract groundwater. The design rate of 75 cfm is the more appropriate rate to assume for PTE estimation. That is the highest observed flow rate that will generate sufficient vacuum to mobilize hydrocarbon vapor and extract groundwater.

Assuming the design flow rate of 75 cfm, and a maximum vapor concentration of 25,000 ug/l, the calculated PTE is 30.8 tpy VOC. This is an increase of 26.9 tpy above the current 3.9 tpy. In addition, VOC concentrations from these remediation systems typically decline over time.

In addition, the HAP emissions from the soil remediation unit are examined. The HAP emission calculations are based on the HAP content of gasoline vapors (Gasoline Distribution Industry (Stage I) - Background Information for Proposed Standards EPA-453/R-94-002a).

The HAP content of normal gasoline by weight percent is:

Hexane	1.6
Benzene	0.9
Toluene	1.3
2,2,4 Trimethylpentane	0.8
Xylene	0.5
Ethyl Benzene	0.1

For example, the soil remediation unit (30.8 tpy VOC) hexane PTE is 0.49 tons per year.

$$0.49 \frac{\text{tons}}{\text{yr}} = \frac{1.6 \text{ tons of hexane}}{100 \text{ tons of VOC}} \cdot \frac{30.8 \text{ tons of VOC}}{\text{yr}}$$

The HAP destruction efficiency of the vapor collection/destruction system is assumed to be equivalent to the VOC destruction efficiency. This is a reasonable assumption (Control Technologies for HAP, U.S. Environmental Protection Agency /625/6-91/014, June 1991).

Estimated Annual Emission Rates (based on 30.8 tpy VOC)

Pollutant	Remediation Area No. 4 Emission Rate (tons/year)*
Hexane	0.49
Xylene	0.15
Ethyl Benzene	0.031
Toluene	0.40
Benzene	.28
2,2,4 Trimethylpentane	.25
Total	1.60

4. Conclusion

Based on the information provided by Magellan Midstream Partners, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 04700034-002 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Bruce Braaten (permit writer/engineer)
 Tom Sinn (enforcement)
 < > (peer reviewer)