

AIR EMISSION PERMIT NO. 12300070- 001
IS ISSUED TO

Williams Pipe Line Company
Williams Pipe Line Company - St. Paul Terminal
2451 West County Road C
Roseville, Ramsey County, Minnesota 55113

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	06/15/96

This permit authorizes the Permittee to operate the stationary source at the address listed above unless otherwise noted in Table A. The Permittee shall 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: Federal; Part 70

Issue Date: January 12, 1998

Expiration:

All Title I Conditions do not expire.

Michael J. Sandusky
Acting Division Manager
Air Quality Division

for Peder A. Larson
Commissioner
Minnesota Pollution Control Agency

ASO:yma

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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	(612)296-6300
Outside Metro Area	1-800-657-3864
TTY	(612)282-5332

The rule 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: Minn. R. ch. 7030 (Noise Pollution Control).

STATIONARY SOURCE DESCRIPTION:

Williams Pipe Line Company owns and operates a bulk terminal and pipe line transport station for gasoline and distillate in Roseville. The stationary source includes thirty nine product storage tanks, a pump station, two tank truck loading racks with vapor controller and vapor processing systems and a soil vapor extraction unit. The terminal receives and transports petroleum products to other terminals through an interstate pipeline distribution network. Petroleum products are also shipped by tank trucks to other retailers and bulk stations. The terminal operates 24 hours per day, 365 days per year. Volatile Organic Compounds are the major source of air emissions from this stationary source.

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/12/98

Facility Name: Williams Pipe Line Co - St Paul

Permit Number: 12300070 - 001

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.	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
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. 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)
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)
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)
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)

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/12/98

Facility Name: Williams Pipe Line Co - St Paul

Permit Number: 12300070 - 001

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
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
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

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/12/98

Facility Name: Williams Pipe Line Co - St Paul

Permit Number: 12300070 - 001

Subject Item: EU 001 Tank Truck Bottom Load - WPL w/Vapor Combustor Control**Associated Items:** CE 001 Flaring

SV 001

What to do	Why to do it
A. POLLUTANT LIMIT	hdr
Total Organic Compounds: less than or equal to 35 milligrams/liter of gasoline loaded.	40 CFR Section 60.502(b); Minn. R. 7011.1550
B. OTHER LIMITS AND REQUIREMENTS	hdr
Loadings: Loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline trucks using the following procedures. The Permittee shall: 1. Obtain the vapor tightness documentation described in 40 CFR Section 60.505(b) for each gasoline tank truck which is to be loaded at the facility. 2. Require the tank identification number to be recorded as each gasoline tank truck is loaded at the facility. 3. Cross-check each tank identification number with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded. 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. 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. 6. Alternate procedures may be used upon application to, and approval by, the Administrator.	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
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 during the performance test 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
Inspect: 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
Repair: Each detection of a leak shall be recorded and the source of the leak repaired within 15 days after each inspection.	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. This documentation shall include, as a minimum, the following information: (1) Test title: Gasoline Delivery Tank Pressure Test -EPA Reference Method 27. (2) Tank owner and address. (3) Tank identification number. (4) Testing location. (5) Date of test. (6) Tester name and signature. (7) Witnessing inspector, if any: Name, signature, and affiliation. (8) Test results: Actual pressure change in 5 minutes, mm of water (average for 2 runs).	40 CFR Section 60.505(b); Minn. R. 7011.1550

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/12/98

Facility Name: Williams Pipe Line Co - St Paul

Permit Number: 12300070 - 001

<p>A record of each monthly leak inspection shall be kept on file at the terminal for at least five (5) years and shall include, at a minimum:</p> <ol style="list-style-type: none"> 1. Date of inspection 2. Findings (no leaks, or nature and severity of leaks) 3. Leak determination method 4. Corrective action (date each leak repaired, reasons for the repair interval >15 days) 5. Inspector name and signature. 	<p>40 CFR Section 60.505(c); Minn. R. 7011.1550; Minn. R. 7007.0800, subp. 5</p>
<p>The Permittee shall keep documentation of all notifications required under 40 CFR Section 60.502(e)(4) on file at the terminal for at least five (5) years.</p>	<p>40 CFR Section 60.505(d); Minn. R. 7011.1550</p>
<p>The Permittee shall keep records of all replacements or additions of components performed on an existing vapor processing system on site for at least five (5) years.</p>	<p>40 CFR Section 60.505(f); Minn. R. 7011.1550</p>
<p>Operation Requirement: At all times, including periods of startup, shutdown, and malfunction, owners and operators shall maintain and operate any affected facility including associated air pollution control equipment in a matter consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection.</p>	<p>40 CFR Section 60.11(d)</p>
<p>C. PERFORMANCE TESTING REQUIREMENTS</p>	<p>hdr</p>
<p>Performance Test: due before end of each 60 months following Permit Issuance for total organic compounds, and 40 CFR 60.502(h).</p>	<p>Minn. R. 7017.2020, subp. 1</p>
<p>Performance Test Pre-test Meeting: due 7 days before Performance Test</p>	<p>Minn. R. 7017.2030, subp. 4</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/12/98

Facility Name: Williams Pipe Line Co - St Paul

Permit Number: 12300070 - 001

Subject Item: EU 002 Tank Truck Bottom Load - Koch w/Vapor Combustor Control**Associated Items:** CE 002 Flaring

SV 002

What to do	Why to do it
A. POLLUTANT LIMIT	hdr
Total Organic Compounds: less than or equal to 35 milligrams/liter of gasoline loaded.	40 CFR Section 60.502(b); Minn. R. 7011.1550
B. OTHER LIMITS AND REQUIREMENTS	hdr
Loadings: Loadings of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline trucks using the following procedures. The Permittee shall: 1. Obtain the vapor tightness documentation described in 40 CFR Section 60.505(b) for each gasoline tank truck which is to be loaded at the facility. 2. Require the tank identification number to be recorded as each gasoline tank truck is loaded at the facility. 3. Cross-check each tank identification number with the file of tank vapor tightness documentation within 2 weeks after the corresponding tank is loaded. 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. 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. 6. Alternate procedures may be used upon application to, and approval by, the Administrator.	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
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 during the performance test 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
Inspect: 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
Repair: Each detection of a leak shall be recorded and the source of the leak repaired within 15 days after each inspection.	40 CFR Section 60.502(j); Minn. R. 7011.1550
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TABLE A: LIMITS AND OTHER REQUIREMENTS

01/12/98

Facility Name: Williams Pipe Line Co - St Paul

Permit Number: 12300070 - 001

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<p>The Permittee shall keep documentation of all notifications required under 40 CFR Section 60.502(e)(4) on file at the terminal for at least five (5) years.</p>	<p>40 CFR Section 60.505(d); Minn. R. 7011.1550</p>
<p>The Permittee shall keep records of all replacements or additions of components performed on an existing vapor processing system on site for at least five (5) years.</p>	<p>40 CFR Section 60.505(f); Minn. R. 7011.1550</p>
<p>Operation Requirement: At all times, including periods of startup, shutdown, and malfunction, owners and operators shall maintain and operate any affected facility including associated air pollution control equipment in a matter consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection.</p>	<p>40 CFR Section 60.11(d)</p>
<p>C. PERFORMANCE TESTING REQUIREMENTS</p>	<p>hdr</p>
<p>Performance Test: due before end of each 60 months following Permit Issuance for total organic compounds, and 40 CFR 60.502(h).</p>	<p>Minn. R. 7017.2020, subp. 1</p>
<p>Performance Test Pre-test Meeting: due 7 days before Performance Test</p>	<p>Minn. R. 7017.2030, subp. 4</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/12/98

Facility Name: Williams Pipe Line Co - St Paul

Permit Number: 12300070 - 001

Subject Item: CE 001 Flaring**Associated Items:** EU 001 Tank Truck Bottom Load - WPL w/Vapor Combustor Control

What to do	Why to do it
Flare Operation: The flare shall be operated at all times when emissions may be vented to them.	Title I Condition: limit taken to avoid major source classification under 40 CFR Section 63.2
Monitoring of the flare: The flare shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.	Title I Condition: limit taken to avoid major source classification under 40 CFR Section 63.2

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/12/98

Facility Name: Williams Pipe Line Co - St Paul

Permit Number: 12300070 - 001

Subject Item: CE 002 Flaring**Associated Items:** EU 002 Tank Truck Bottom Load - Koch w/Vapor Combustor Control

What to do	Why to do it
Flare Operation: The flare shall be operated at all times when emissions may be vented to them.	Title I Condition: limit taken to avoid major source classification under 40 CFR Section 63.2
Monitoring of the flare: The flare shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.	Title I Condition: limit taken to avoid major source classification under 40 CFR Section 63.2

TABLE B: SUBMITTALS

01/12/98

Facility Name: Williams Pipe Line Co - St Paul
Permit Number: 12300070 - 001

Table B lists the submittals you must send to the Commissioner. Table B is divided into two sections, for source-specific submittal requirements and for submittals required of all permittees. Source-specific submittals are further organized as either one-time only or recurrent requirements. You may also be subject to additional reporting requirements contained in the compliance schedule located in Table C of this permit. All submittals must be postmarked or received by the date specified in the table, and certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Submittals which must be provided on standardized forms approved by the Commissioner are noted in Tables B and C.

Send any application for a permit or permit amendment to: Permit Information Coordinator, Permit Section, Air Quality Division, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4914. Also send the Permit Information Coordinator notices of: accumulated insignificant activities, installation of control equipment, replacement of an emissions unit, and changes that contravene a permit term.

Send all other submittals to: Compliance Tracking Coordinator, Compliance Determination Unit, Air Quality Division, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

01/12/98

Facility Name: Williams Pipe Line Co - St Paul

Permit Number: 12300070 - 001

What to send	When to send	Portion of Facility Affected
Performance Test Notification (written)	due 30 days before Performance Test	EU001, EU002
Performance Test Plan	due 30 days before Performance Test	EU001, EU002
Performance Test Report - Microfiche Copy	due 105 days after Performance Test	EU001, EU002
Performance Test Report	due 45 days after Performance Test	EU001, EU002
Report	due 2 days after Discovery of Deviation (Discovery of Deviations Endangering Human Health or the Environment Report (written)). Submit a written description of any deviations 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.	Total Facility

TABLE B: RECURRENT SUBMITTALS

01/12/98

Facility Name: Williams Pipe Line Co - St Paul

Permit Number: 12300070 - 001

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance . The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31.	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

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 12300070-001
(AQD File No. 1858G)

This Technical Support Document (TSD) is for all the interested parties of 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 and Operator Address and Phone Number (list both if different)	Facility Address (SIC Code: 5171)
Williams Pipe Line Company - St. Paul Terminal P.O. Box 3448 Tulsa, Oklahoma 74101	2451 West County Road C Roseville, Minnesota 55113

1.2. Description of the stationary source:

Williams Pipe Line Company owns and operates a bulk terminal and pipe line transport station for gasoline and distillates in Roseville. The stationary source includes thirty-nine product storage tanks, a pump station, two tank truck loading racks with vapor controller and vapor processing systems and a soil vapor extraction unit. The terminal receives and transports petroleum products to other terminals through an interstate pipeline distribution network. Petroleum products are also shipped by tank trucks to other retailers and bulk stations. The terminal operates 24 hours per day, 365 days per year. Volatile Organic Compounds (VOCs) are the major source of air emissions from this facility.

1.3 Description of any changes allowed with this permit issuance

This permit also allows the operation of the existing loading rack that has not been previously permitted.

1.4 Description of all amendments issued since the issuance of the last total facility permit and to be included in the Part 70 Permit.

Permit Number and Issuance Date	Action Authorized
1858G094-I/O-1 March 11, 1994	Installation and operation of a four spot bottom loading tank truck loading rack and a vapor controller system.

1.5. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary:

Pollutant	PTE (tons/year)				
	EU 01 Rack	EU 02 Rack	EU03 Clean-up	Tanks	Fugitives
Particulate Matter (PM)	0.0	0.0	0.0	0.0	0.0
Particulate Matter less than 10 micron (PM ₁₀)	0.0	0.0	0.0	0.0	0.0
Sulfur Dioxide (SO ₂)	0.0	0.0	0.0	0.0	0.0
Nitrogen Oxides (NO _x)	14.04	14.04	0.0	0.0	0.0
Carbon Monoxide (CO)	35.11	35.11	0.0	0.0	0.0
Volatile Organic Compounds (VOC)	52.37	52.37	17.88	56.14	2.19
Lead	0.0	0.0	0.0	0.0	0.0
Hazardous Air Pollutants (combined)	6.37	6.37	1.28	5.25	0.30
Benzene	1.11	1.11	0.186	0.88	0.20
Ethyl Benzene	0.12	0.12	0.271	0.092	0.002
Hexane	1.96	1.96	0.0	1.66	0.011
Toluene	1.59	1.59	0.287	0.79	0.0356
2,2, 4 Trimethylpentane	0.98	0.98	0.0	1.29	0.18
Xylenes	0.61	0.61	0.535	0.543	0.029

	PM tpy	PM ₁₀ tpy	SO ₂ tpy	NO _x tpy	CO tpy	VOC tpy	Pb tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions*	0.0	0.0	0.0	28.1	70.2	180.9	0.0	5.59	19.57
Total Facility Actual Emissions*	0.0	0.0	0.0	5.4	26.7	104.8	0.0	1.2	4.2

*These are the limited potential emissions from column 3 in GI-07 from Delta.

Table 2. Facility(TF) and Permit Classification

Classification (put x in appropriate box)	Major/Affected Source	*Synthetic Minor	*Minor
PSD (VOC)	X		
NAAR (CO)			X
Part 70 Permit Program (VOC)	X		

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

Regulatory Overview of Facility

EU, GRP, or SV No.	Applicable Regulations	Comments:
EU001	40 CFR pt. 60, subp. XX; Minn. R. 7011.1550.	Standards of Performance for Bulk Gasoline Terminals
EU002	40 CFR pt. 60, subp. XX; Minn. R. 7011.1550.	Standards of Performance for Bulk Gasoline Terminals
Total Facility	40 CFR § 52.21; Minn. R. 7007.3000.	The facility is one of the 28 source categories described in 40 CFR § 52.21, (b)(1)(i)(a) and therefore is subject to the 100 tons per year major source definition.

3. Technical Information

Emission Calculation Discussion:

AP-42 Chapter 5.2 Transportation and Marketing of Petroleum Liquids

1. Loading losses are the primary source of evaporative emissions. Emissions for loading petroleum liquid can be estimated using the following expressions:

$$L_L = 12.46 (SPM/T) \text{ where } L_L = \text{loading loss in pounds per 1000 gallons of liquid loaded}$$

S = saturation factor + 0.6 for submerged loading with dedicated normal service

P = true vapor pressure of liquid loaded (psia)

M = molecular weight of vapors

T = temperature of bulk liquid loaded, ° R

Example for RVGP 10 Gasoline Loading: $L_L = 12.46 (0.6)(3.8607)(66)/(44.72 + 460) = 3.774 \text{ lb}/10^3 \text{ gal}$

Maximum of capacity of loading rack = 96,000 gallons per hour.

Total loading losses = $3.774 \text{ lb}/10^3 \text{ gal} (96,000 \text{ gallons/hr})(8760 \text{ hrs/yr})(\text{ton}/2000 \text{ lbs}) = 1586.9 \text{ tons/yr}$.

With the control efficiency of 96.7 percent: $1586.9 (1-0.967) = 52.37 \text{ tons/yr}$.

Total loading losses for two loading racks = 104.68 tons/yr for gasoline.

See spreadsheet for the summary of different materials loaded.

2. However, there is an underlying applicable requirement, the NSPS for Bulk Gasoline Terminals that limits VOC emissions to 35 mg/l of VOC per liter of gasoline loaded.

$35 \text{ mg/l} \times 3.7854 \text{ l/gal} \times 1 \text{ g}/1000 \text{ mg} \times 1 \text{ kg}/1000 \text{ g} \times 2.2046 \text{ lb/kg} = 0.00029 \text{ lb/gal}$

$0.00029 \text{ lb/gal} \times 96,000 \text{ gal/hr} \times 8760 \text{ hrs/yr} \times \text{ton}/2000 \text{ lbs} = 121.94 \text{ tons}$. With the control efficiency of 96.7 percent. $(121.94)(1-0.967) = 4.02 \text{ tons/yr per loading rack}$.

The flare is necessary as an indicator for compliance with the NSPS requirements and to avoid major source classification under 40 CFR pt. 63. The control efficiencies were applied to determine potential emissions, and therefore there are applicable requirements associated with the flare.

3. There are no applicable performance standards for the tanks because the tanks were installed prior to July 7, 1969. The emissions were calculated using the Tanks Program 2.0

4. The soil vapor extraction unit was installed on October 1994. This is a temporary source used to clean up hydrocarbons for the soil and groundwater. The concentration of the hydrocarbons in the soil will continue to decrease. See data on the emission rate attached. The source of power for the blower is electricity.

4. Conclusion

Based on the information provided by the Williams Pipe Line Company - St. Paul Terminal; the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 12300070-001 (AQD File No. 1858G) and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

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Attachment: GI-07, Facility Emission Summary
EC forms for calculations
CE forms