

**AIR EMISSION PERMIT NO. 12900046-004**

**IS ISSUED TO**

Alliance Pipeline LP

**ALLIANCE PIPELINE - OLIVIA 23-A**

38884 870th Avenue

Bird Island, Renville County, MN 55310

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	Issue Date	Action Number
Total Facility Operating Permit	08/1998	06/08/1999	001
Major Amendment	07/05/2000	02/21/2001	002
Administrative Amendment	MPCA Initiated	06/14/2001	003
Total Facility Oper. Permit - Reissuance	12/05/2003	see below	004

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

**Permit Type:** Federal; Part 70/Limits to Avoid New Source Review

**Issue Date:** January 26, 2006

**Expiration:** January 26, 2011  
Title I Conditions do not expire.

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

for Sheryl A. Corrigan  
Commissioner  
Minnesota Pollution Control Agency

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**NOTICE TO THE PERMITTEE:**

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

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

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

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

**PERMIT SHIELD:**

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

**FACILITY DESCRIPTION:**

This facility is a compressor station on a natural gas pipeline. A combustion turbine is used to power the compressor. A pair of alternately-operated small heating boilers and an emergency power generator are also located at the site. The combustion turbine is the only activity that is not insignificant.

This permit is a re-issuance of the part 70 operating permit. No changes are authorized by this permit action.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

01/26/06

Facility Name: Alliance Pipeline - Olivia 23-A  
 Permit Number: 12900046 - 004

**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
Ambient Air Quality Standards: The Permittee shall comply with and upon written request demonstrate compliance with National Primary and Secondary Ambient Air Quality Standards in Title 40 CFR part 50, and the Minnesota Ambient Air Quality Standards at Minn. R. 7009.0010 to 7009.0080.	40 CFR part 50; Minn. Stat. Sec. 116.07, subs. 4a and 9; Minn. R. 7007.0100, subs. 7A, 7L and 7M; Minn. R. 7007.0800, subs. 1, 2, and 4; Minn. R. 7009.0010-7009.0080
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
<p>Performance Test Notifications and Submittals:</p> <p>Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements.</p> <p>Performance Test Notification (written): due 30 days before each Performance Test                      Performance Test Plan: due 30 days before each Performance Test                      Performance Test Pre-test Meeting: due 7 days before each Performance Test                      Performance Test Report: due 45 days after each Performance Test                      Performance Test Report - Microfiche Copy: due 105 days after each Performance Test</p> <p>The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.</p>	Minn. R. 7017.2030, subp. 1-4, Minn. R. 7017.2035, subp. 1-2, and Minn. R. 7017.2018
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
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
<p>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.</p> <p>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.</p>	Minn. R. 7019.1000, subp. 3
<p>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.</p> <p>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.</p>	Minn. R. 7019.1000, subp. 2
Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7019.1000, subp. 1

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

01/26/06

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 004

<p>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:</p> <ol style="list-style-type: none"> <li>1. the cause of the deviation;</li> <li>2. the exact dates of the period of the deviation, if the deviation has been corrected;</li> <li>3. whether or not the deviation has been corrected;</li> <li>4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and</li> <li>5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.</li> </ol>	<p>Minn. R. 7019.1000, subp. 1</p>
<p>Operation Changes: In any shutdown, breakdown, or deviation the Permittee shall immediately take all practical steps to modify operations to reduce the emission of any regulated air pollutant. The Commissioner may require feasible and practical modifications in the operation to reduce emissions of air pollutants. No emissions units that have an unreasonable shutdown or breakdown frequency of process or control equipment shall be permitted to operate.</p>	<p>Minn. R. 7019.1000, subp. 4</p>
<p>Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated, unless otherwise noted in Table A.</p>	<p>Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)</p>
<p>Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.</p>	<p>Minn. R. 7011.0150</p>
<p>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.</p>	<p>Minn. R. 7007.1150 through Minn. R. 7007.1500</p>
<p>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).</p>	<p>Minn. R. 7007.1400, subp. 1(H)</p>
<p>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.</p>	<p>Minn. R. 7007.0800, subp. 5(B)</p>
<p>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).</p>	<p>Minn. R. 7007.0800, subp. 5(C)</p>
<p>Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not federally enforceable.</p>	<p>Minn. R. 7030.0010 - 7030.0080</p>
<p>The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.</p>	<p>Minn. R. 7007.0800, subp. 16</p>
<p>Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.</p>	<p>Minn. R. 7007.0800, subp. 9(A)</p>
<p>Emission Inventory Report: due 91 days after end of each calendar year (April 1). Submit the report on a form approved by the Commissioner.</p>	<p>Minn. R. 7019.3000 through Minn. R. 7019.3010</p>
<p>Emission Fees: due 60 days after receipt of an MPCA bill.</p>	<p>Minn. R. 7002.0005 through Minn. R. 7002.0095</p>

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

01/26/06

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 004

**Subject Item: EU 001 Gas Turbine - GE LM2500 DLE**

**Associated Items: SV 001**

What to do	Why to do it
EMISSION LIMITS	hdr
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Nitrogen Oxides: less than or equal to 30 lbs/hour	Title I Condition: To limit potential emissions to less than major source levels as defined by 40 CFR Section 52.21 and Minn. R. 7007.3000
Nitrogen Oxides: less than 121 parts per million dry by volume at 15% oxygen.	40 CFR Section 60.332(a); Minn. R. 7011.2350
Sulfur Dioxide: Less than or equal to 0.015 percent by volume at 15 percent oxygen and on a dry basis, or,	40 CFR Section 60.333; Minn. R. 7011.2350
Sulfur content of fuel: less than or equal to 0.8 percent by weight.	
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input	Minn. R. 7011.2300, subp. 2
OPERATING CONDITIONS	hdr
Fuel Use: Limited to pipeline natural gas	Minn. R. 7007.0800, subp. 2
MONITORING	hdr
<p>Fuel Monitoring: The Permittee shall follow the applicable fuel sulfur and nitrogen content monitoring requirements in Section 60.334(h) and shall monitor at the frequency specified in 60.334(i).</p> <p>Section 60.334(h)(3) allows the owner or operator to not monitor total sulfur content of gaseous fuel if the fuel is shown to meet the definition of natural gas as defined in Section 60.331(u), regardless if there is an existing custom fuel monitoring schedule approved by the administrator. Section 60.334(h)(2) allows the owner or operator to not monitor fuel nitrogen content if a NOx emission allowance ('F') for fuel-bound nitrogen of zero is claimed in the applicable equation in Section 60.332.</p>	40 CFR Sections 60.334(h) and (i); Minn. R. 7011.2350
PERFORMANCE TESTING	hdr
Performance Test: no later than 180 days after each EU 001 gas generator or compressor bundle replacement, but not at an interval greater than 36 months after the most recent EU 001 test. This performance test is for nitrogen oxides. Testing shall be performed in accordance with 40 CFR Section 60.8 and following the procedures specified in 40 CFR Section 60.335.	40 CFR Section 60.8(a); Minn. R. 7017.2020, subp. 1
RECORDKEEPING	hdr
Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.	40 CFR Section 60.7
Maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required, recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.	40 CFR Section 60.7
TURBINE COMPONENT REPLACEMENT PROVISIONS	hdr
<p>EU 001 Turbine Component Replacement Authorization: The Permittee is allowed to replace the compressor, gas generator (combustor), and power turbine of the General Electric LM2500 DLE gas turbine (EU 001) with an identical component as needed. If the compressor or gas generator is replaced, the Permittee shall furnish notifications and reports and conduct a NOx test in the required timeframe according to part 60 subparts A and GG, and Minn. R. chapter 7017.</p> <p>This authorization is not for installation of an additional gas turbine, does not permit operation of more than one turbine at the facility, and does not allow an increase in the emission rate (lb/hr, tpy, lb/hp-hr, lb/mmBtu, etc.) of any pollutant. The gas turbine will continue to be designated as EU 001 regardless if these components have been replaced, and the gas turbine shall continue to be subject to all requirements listed under subject item EU 001.</p>	Minn. R. 7007.0800, subp. 2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

01/26/06

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 004

EU 001 Turbine Component Replacement Authorization (continued): The replacement shall not trigger any new applicable requirements. The Permittee shall comply with all existing permit conditions.	Minn. R. 7007.0800, subp. 2
Turbine Component Replacement Recordkeeping: The Permittee shall record the date and nature of each component replacement no later than the day after completion of each replacement.	Minn. R. 7007.0800, subp. 5

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

01/26/06

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 004

**Subject Item: EU 003 Auxiliary Power Unit (APU) 400 kW****Associated Items: SV 003**

<b>What to do</b>	<b>Why to do it</b>
Hours of Operation: The Permittee shall maintain documentation on site that the unit is an emergency generator by design that qualifies under the U.S. EPA memorandum entitled "Calculating Potential to Emit (PTE) for Emergency Generators" dated September 6, 1995, limiting operation to 500 hours per year.	Minn. R. 7007.0800, subp. 4 and 5



**TABLE B: SUBMITTALS**

01/26/06

Facility Name: Alliance Pipeline - Olivia 23-A  
Permit Number: 12900046 - 004

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

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

Send any application for a permit or permit amendment to:

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

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

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

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

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

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

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

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

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

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

01/26/06

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 004

<b>What to send</b>	<b>When to send</b>	<b>Portion of Facility Affected</b>
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility

**TABLE B: RECURRENT SUBMITTALS**

01/26/06

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 004

<b>What to send</b>	<b>When to send</b>	<b>Portion of Facility Affected</b>
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 06/08/1999. 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 31 days after end of each calendar year starting 06/08/1999 (for the previous calendar year). Submit the certification on a form approved by the Commissioner, both to the Commissioner, and to the U.S. EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

APPENDIX MATERIAL

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046-004

Insignificant Activities Required to be Listed

Activity	Minn. R. 7007.1300, subpart	Applicable Performance Standard
natural gas-fired boiler <sup>1</sup>	subp. 4	Minn. R. 7011.0515 PM and opacity
natural gas-fired boiler <sup>1</sup>	subp. 4	Minn. R. 7011.0515 PM and opacity
natural gas-fired auxiliary power unit/ emergency generator (EU 003)	subp. 4	Minn. R. 7011.2300 Opacity and SO <sub>2</sub>

<sup>1</sup>Note: the two boilers are redundant and operate alternately and not simultaneously

## TECHNICAL SUPPORT DOCUMENT

For

### DRAFT/PROPOSED AIR EMISSION PERMIT NO. 12900046-004

This technical support document is for all parties interested in the draft/proposed permit and meets the requirements in 40 CFR § 70.7(a)(5) and Minn. R. 7007.0850, subp. 1. This document provides the legal and factual justification for each applicable requirement or policy decision considered in the determination to issue the draft/proposed permit.

#### 1. General Information

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

Applicant/Address	Stationary Source/Address (SIC Code: 4922)
Alliance Pipeline 6385 Old Shady Oak Road Suite 150 Eden Prairie, MN 55344	38884 870th Ave Bird Island Renville County
Contact: Troy T. Meinke Phone: (952) 983-1009 Fax: (952) 944-9166	

##### 1.2. Facility Description

This facility is a compressor station on a natural gas pipeline. A combustion turbine is used to power the compressor. A pair of alternately-operated small heating boilers and an emergency power generator are also located at the site. The combustion turbine is the only activity that is not insignificant.

##### 1.3 Description of any Changes Allowed with this Permit Issuance

This permit is a re-issuance of the part 70 operating permit. No changes are authorized by this permit action.

##### 1.4 Description of All Amendments Issued Since the Issuance of the Last Total Facility Permit

Permit Number and Issuance Date	Action Authorized
12900046-002; Feb 21, 2001	Add allowance to replace turbine with identical model turbine
12900046-003; June 14, 2001	Revise Title V permit modeling requirements

##### 1.5. Facility Emissions:

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

	PM tpy	PM <sub>10</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> tpy	CO tpy	VOC tpy	All HAPs tpy
Total Facility Limited Potential Emissions	6.17	6.15	3.09	138.0	76.2	2.18	0.93
Total Facility Actual Emissions (2003)	5.3	5.3	2.6	76.4	65.8	1.7	HAPs not reported in emission inventory

**Table 2. Facility Classification**

<b>Classification</b>	<b>Major/Affected Source</b>	<b>Synthetic Minor</b>	<b>Minor</b>
PSD		NO <sub>x</sub>	PM, PM <sub>10</sub> , CO, SO <sub>2</sub> , VOC
Part 70 Permit Program	NO <sub>x</sub>		PM <sub>10</sub> , CO, SO <sub>2</sub> , VOC
Part 63 NESHAP			single and total HAP

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

### New Source Review

The combustion turbine is subject to a NO<sub>x</sub> limit to restrict total facility emissions to less than the major source level under New Source Review. The limit is necessary for avoiding NSR because the part 60 subp. GG NO<sub>x</sub> limit allows a NO<sub>x</sub> emissions concentration of 121 ppmvd, which results in about 0.44 lb/mmBtu which equals 91 lb/hr or 399 tpy.

### Part 70 Permit Program

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

### New Source Performance Standards (NSPS)

The combustion turbine is subject to part 60, subp. GG, Standards of Performance for Stationary Gas Turbines.

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

The facility is a natural minor source of HAPs so no NESHAPs apply.

### Minnesota State Rules

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

- Minn. R. 7011.0515 Standards of Performance for New Indirect Heating Equipment
- Minn. R. 7011.2300 Standards of Performance for Stationary Internal Combustion Engines

**Table 3. Regulatory Overview of Facility**

EU, GP, or SV	Applicable Regulations	Comments:
EU 001	40 CFR part 60 Subpart GG	NO <sub>x</sub> and SO <sub>2</sub> limits, monitoring, recordkeeping, reporting, and testing

### 3. Technical Information

- Combustion Turbine Replacement Authorization: The Permittee has an inventory of spare gas generators (the part of the combustion turbine where fuel is combusted and hot exhaust gas is created), power turbines, and compressor bundles. The Permittee changes these components at prescribed intervals or when component failure occurs. The Permittee states that this is standard industry practice.

This permit authorizes periodic replacement of the gas generator, compressor, and power turbine. A prior permitting action attempted to acknowledge this replacement practice by adding a second turbine emission unit (EU 004) to the permit. However, this was not appropriate because there are never two combustion turbines at the facility, EU 001 is never actually removed from the facility, and even if the entire combustion turbine is completely replaced it would be replaced by an identical model unit from the manufacturer. Therefore EU 004 has been removed from the permit by this permit action.

This replacement is not an NSR modification because the current 30 lb/hr NO<sub>x</sub> limit applies to EU 001 regardless of EU 001 component replacements. In addition, the permit specifically states that an emissions increase of any pollutant is not authorized as part of the replacement authorization. Also, the Permittee is required to conduct NO<sub>x</sub> testing according to part 60 subpart A and GG, and Minn. R. chapter 7017, if the combustor (gas generator) or compressor are replaced. This testing requirement will meet any potentially applicable testing requirement of subpart A, and is required because these components have the greatest affect on NO<sub>x</sub> emissions.

- PM<sub>10</sub> Ambient Air Analysis: Screening of Facility emissions for ambient air impacts (conducted as part of the 2004 capped permit rulemaking) identified a potential problem for the 24-hour SO<sub>2</sub> and PM<sub>10</sub> NAAQS. Refined modeling conducted by MPCA staff resolved this issue.
- Insignificant Activities: All sources at this facility, except the gas turbine, are insignificant. There are two small alternately operated natural gas-fired boilers, and a natural gas-fired

auxiliary power unit. For the auxiliary power unit, actual NO<sub>x</sub> emissions are below 1.0 tpy which allows the unit to remain insignificant.

### 3.1 Periodic Monitoring

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

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

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

Table 4 summarizes the periodic monitoring requirements for those emission units for which the monitoring required by the applicable requirement is nonexistent or inadequate.

**Table 4. Periodic Monitoring**

<b>Emission Unit or Group</b>	<b>Requirement (basis)</b>	<b>Additional Monitoring</b>	<b>Discussion</b>
EU 001	30 lb/hr NO <sub>x</sub> Title I Condition: To limit potential emissions to less than major source levels as defined by 40 CFR Section 52.21	None	Use of pipeline natural gas and dry low-NO <sub>x</sub> combustion to restrict NO <sub>x</sub> emissions is inherent to the turbine combustor
	SO <sub>2</sub> 0.0015% by vol or 0.8% fuel sulfur content 40 CFR Section 60.333	None	Use of pipeline natural gas ensures compliance with these limits

### 3.2 Comments Received



Public Notice Period: November 23, 2005 - December 23, 2005  
EPA 45-day Review Period: November 23, 2005 - January 9, 2006

No comments were received.

#### **4. Conclusion**

Based on the information provided by Alliance Pipeline, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 04700059-004 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:     Marshall Cole (permit writer/engineer)  
   Sarah Kilgriff (enforcement)  
   Steve Pak and Jenny Reinertsen (peer review)

Attachment: Emission Calculations Spreadsheet