AIR EMISSION PERMIT NO. 12900046- 001
IS ISSUED TO

Alliance Pipeline LP

Alliance Pipeline - Olivia 23-A
Mile Post 436.5 Southeast 1\4 Sec 14
Olivia, Renville County, Minnesota 56277

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	August, 1998

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: Federal ; Part 70
Synthetic Minor under 40 CFR 52.21
Issue Date: June 8, 1999
Expiration: June 8, 2004
Title I Conditions do not expire.

Don Smith
Rodney E. Massey
District Manager
South District

for Karen A. Studders
Commissioner
Minnesota Pollution Control Agency

JR:lk

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NOTICE TO THE PERMITTEE:

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

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

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

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

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Certain requirements which have been determined not to apply are listed in Table A of this permit.

The permit shield, however does not apply to:

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

FACILITY DESCRIPTION:

The Alliance Pipeline L.P. Olivia 23-A Compressor Station in Renville County, Minnesota consists of a natural gas fuled compressor turbine, a station heating boiler, and an emergency engine generator. Pipeline quality natural gas is the only fuel used on site.

The Alliance pipeline will provide increased transportation capacity for Western Canadian Sedimentary Basin gas to reach U.S. markets. The pipeline-qulaity gas will be transported in a 36-inch pipeline for approximately 1900 miles through Canada and the United States. The pipeline route will start in Fort St. John located in British Columbia, Canada and run through the Canadian provinces of Alberta and Saskatchewan before entering the United States in the State of North Dakota. From North Dakota, the pipeline will pass through Minnesota and Iowa, terminating in Illinois. Within the State of Minnesota, the pipeline will require one compressor station which will be located in Renville County near the town of Olivia and one compressor station which will be located in Freeborn County, near the town of Albert Lea, Minnesota. The pipeline terminus is located near Joliet, Illinois at a pipeline "hub" where it will be connected to five existing pipeline systems.

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/08/99

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 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
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: 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
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

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/08/99

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 001

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)
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 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 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

06/08/99

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 001

Subject Item: **EU 001 Gas Turbine**

Associated Items: SV 001

What to do	Why to do it
EMISSION LIMITS	hdr
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 52.21,
Nitrogen Oxides: less than 121 parts per million	40 CFR Section 60.332(d)
Sulfur Dioxide: Less than or equal to one of the following: (a) 0.015 percent by volume at 15 percent oxygen and on a dry basis, or (b) burn no fuel which contains sulfur in excess of 0.8 percent by weight.	40 CFR Section 60.333
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input	Minn. R. 7011.2300, subp. 2
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
OPERATING CONDITIONS	hdr
Fuel Use: Limited to pipeline quality natural gas	Minn. R. 7007.0800, subp. 2; meets requirements of Minn. R. 7011.2300, subp. 2
MONITORING	hdr
Sulfur Monitoring: the analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The sample is to be taken at the Olivia compressor station. Monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR Section 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.	40 CFR Section 60.334(b)
(continued from above) If after the first 2 years of sulfur monitoring, the sulfur content of the fuel shows little variability, and when calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR Section 60.333, sample analysis shall be conducted twice per annum (semiannually). This monitoring shall be conducted during the first and third quarters of each calendar year.	40 CFR Section 60.334(b)
(continued from above) Notification of Noncompliance: Should any sulfur analysis indicate noncompliance with 40 CFR Section 60.333, the Permittee shall notify the MPCA of such excess emissions and the custom fuel monitoring schedule shall be re-examined by the Administrator. Sulfur monitoring shall be conducted weekly during the interim period when this custom fuel monitoring schedule is being re-examined.	40 CFR Section 60.334(b)
Recordkeeping: records of sample analysis and fuel supply pertinent to the custom fuel monitoring schedule shall be retained for a period of five (5) years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.	40 CFR Section 60.334(b)
PERFORMANCE TESTING	hdr
Performance Test: due 60 days after achieving maximum capacity at which the affected facility will be operated, but not later than 180 day after initial startup. 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
Performance Test Pre-test Meeting: due 7 days before Performance Test	Minn. R. 7017.2030, subp. 4
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
Record type of fuel used on a monthly basis.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/08/99

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 001

SUBMITTALS AND REPORTS	hdr
For additional submittals and reports, see Table B.	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/08/99

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 001

Subject Item: **EU 002 Station Boiler**

Associated Items: SV 002

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input	Minn. R. 7011.0550
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20 percent or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60 percent.	Minn. R. 7011.0515, subp. 2
OPERATING CONDITIONS	hdr
Fuel Use: Limited to natural gas only.	Minn. R. 7007.0800, subp. 2
RECORDKEEPING	hdr
Record type of fuel used on a monthly basis.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/08/99

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 001

Subject Item: **EU 003 Auxiliary Power Unit (APU)**

Associated Items: SV 003

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
Sulfur Dioxide: less than or equal to 0.5 lbs/million Btu heat input	Minn. R. 7011.2300, subp. 2
OPERATING LIMITS	hdr
Fuel Use: Limited to natural gas only.	Minn. R. 7007.0800, subp. 2
RECORDKEEPING	hdr
Recordkeeping: record hours of operation and type of fuel used. Hours of operation shall be recorded daily. Fuel type shall be recorded once each month.	Minn. R. 7007.0800, subp. 5

TABLE B: SUBMITTALS

06/08/99

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 001

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

06/08/99

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 001

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 Protocol	due 1,096 days after Permit Issuance. The purpose of the modeling is to estimate ambient impacts of NOx emissions.	Total Facility
Computer Dispersion Modeling Results	due 1,462 days after Permit Issuance	Total Facility
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup	EU001
Notification of the Anticipated Date of Initial Startup	due 30 days before Anticipated Date of Initial Startup but no earlier than 60 days before anticipated initial startup.	EU001
Performance Test Notification	due 30 days before Performance Test	EU001
Performance Test Plan	due 30 days before Performance Test	EU001
Performance Test Report - Microfiche Copy	due 105 days after Performance Test	EU001
Performance Test Report	due 45 days after Performance Test	EU001
Testing Frequency Plan	due 60 days after Initial Performance Test to for NOx. The plan shall specify a testing frequency based on the initial performance test and MPCA guidance. Future performance tests at year (12-month), 36-month, or 60-month intervals or as applicable shall be required upon written approval of the plan by MPCA per Minn. R. 7017.2020, subp. 1.	EU001

TABLE B: RECURRENT SUBMITTALS

06/08/99

Facility Name: Alliance Pipeline - Olivia 23-A

Permit Number: 12900046 - 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 31 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 <, both to the Commissioner, and to the U.S. EPA regional office in Chicago>. This report covers all deviations experienced during the calendar year. < The EPA copy shall be sent to: Mr. George Czerniak, Chief, Air Enforcement and Compliance Assurance Branch, Air and Radiation Division, EPA Region V, 77 West Jackson Boulevard, Chicago, Illinois 60604>	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
DRAFT AIR EMISSION PERMIT NO.12900046-001

This technical support document is for all the interested parties of the draft permit. The purpose of this document is to set forth the legal and factual basis for the draft 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: 4922)
Alliance Pipeline L.P. 400, 605-5 Avenue S.W. Calgary, Alberta, Canada T2P 3H5	Mile Post 436.5 Section SE 1/4 Section 14 Township 116N Range 34W Olivia, Minnesota Renville County

1.2. Description of the facility

Alliance Pipeline proposes to construct a compressor station for a natural gas pipeline at the above address. There will be three emission units on site; a compressor turbine, EU001; a station heating boiler, EU002; and an auxiliary power unit, EU003. All three emission units are restricted to burning only natural gas.

1.3 Description of any changes allowed with this permit issuance

This permit authorizes initial construction and subsequent operation of this new facility.

1.4. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary:

EU #	SV#	Emission Unit Description	PM tpy	PM10 tpy	SO2 tpy	NOx tpy	CO tpy	VOC tpy	Pb tpy	Single HAP tpy	All HAPs tpy
001		Turbine	29.8	29.8	1.3	131	58.3	0.4	neg		
002		Boiler	0.2	0.2	0.01	1.7	0.4	0.1	neg		

003		Emergency generator	0.008	0.008	0.001	0.002	0.000	0.06	neg		

	PM tpy	PM10 tpy	SO2 tpy	NOx tpy	CO tpy	VOC tpy	Pb tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions*	30	30	1.4	133	59	0.51	neg	<1	1

*These are the limited potential emissions from column 3 in GI-07 from Delta. They differ from those in the permit application sent by the company in that they have been verified and corrected as need be by MPCA staff. These are the potential emissions that would appear in a public notice.

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Table 2. Facility(TF) and Permit Classification

Classification (put x in appropriate box)	Major/Affected Source	*Synthetic Minor	*Minor
PSD (list pollutant)		NOx	PM, PM10, SO2, CO, VOC
NAAR (list pollutant)			
Part 70 Permit Program (list pollutant)	NOx		PM, PM10, SO2, VOC, CO

* 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 #	Applicable Regulations	Comments:
EU001	40 CFR pt. 60, Subp. GG	Standards of Performance for Stationary Gas Turbines
EU002	Minn. R. 7011.0515	Standards of Performance for New Indirect Heating Equipment
EU003	Minn. R. 7007.2300	Standards of Performance for Stationary Internal Combustion Engines

3. Technical Information

Emission Limits: The turbine is subject to NSPS subpart GG. That performance standard sets a NOx emission limit of 121 ppm for units of this type that are burning fuel with no fuel bound nitrogen. The manufacturer estimates emissions at 25 - 40 ppm (86.3 - 91.5 tons per year), depending on operating conditions. Regardless of the manufacturer's estimates, the limit would normally be set at 121 ppm, as per the NSPS. However, that yields potential emissions that are greater than 250 tons, which would make this a major new source under 40 CFR § 52.21, the prevention of significant deterioration regulations.

In order to limit potential emissions to less than major source levels, the permit contains a limit of 30 lb/hour (131 tons per year). This limit was derived such that it created a safety factor between it and the estimated emissions, and yet restricted potentials to less than 250 tons per year.

Performance Testing and Monitoring: Subpart GG requires an initial performance test on the compressor turbine for NOx, and periodic monitoring using a custom schedule for fuel sulfur content (discussed below). No stack emissions testing is required for the heating boiler (EU 002) and backup generator (EU 003) because they are unlikely, if not completely unable, to violate their emission limits burning natural gas. AP-42 predicts an emission factor of 7.5 lb/mmcf or .0075 lb/mmBtu of particulate for the boiler, and the emission limit is 0.4 lb/mmBtu. For opacity, the agency's experience has been that natural gas burned in either boilers or internal combustion engine generators does not cause an opacity problem. These are also small sources of emissions at the source. The only periodic monitoring requirements for EU 002 and EU 003 are for monthly recording of fuel type combusted.

Custom Fuel Monitoring Schedule: Under 40 CFR 60.334, daily monitoring of the sulfur content of the fuel (natural gas) is required unless a custom fuel monitoring schedule is applied for and granted.

A custom monitoring plan has been applied for with U.S. EPA Region V, and has been received. Documentation of that approval is attached.

Also, since there are no entries along the gas line between its origination in Canada, and the terminus in Illinois, monitoring is required at only one of the plants in Minnesota. Alliance has chosen to perform the monitoring at the Olivia plant, rather than the Albert Lea plant, and as such, both permits specify that the monitoring shall be done at the Olivia plant. EPA has granted approval in the past for monitoring at a single plant, when all plants will be supplied with a single fuel source. Attached is a letter from EPA to the Mississippi Department of Environmental Quality approving such reduced monitoring. This approval was referenced in discussions with Keven Vuillemier of Region V as justification for proposing the reduced monitoring at the Alliance Pipeline Stations, and was used as the basis for granting a monitoring schedule that provides for monitoring at only one of five Great Lakes Pipeline compressor stations in Minnesota. Those permits have been approved by EPA and issued.

Dispersion Modeling: Screen modeling has been done (see attachments) for this facility. Those results show that the impact for NOx should be well below the ambient standards. More detailed modeling is still required by the permit, because the dispersion modeling done as part of this permit issuance, does not consider terrain or building downwash. Currently, it is MPCA policy to require dispersion modeling in cases where potential emissions exceed 100 tons per year.

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. 12900046-1 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: Jenny L. Reinertsen, Marshall Cole, Dave Vaaler

Attachment: 1. Emission Calculations
2. Modeling Calculations and Results
3. Custom Fuel Monitoring Schedule

Attachment 1, Emission Calculations

Permit Action Number:
Date: 12/2/2003

Calculation of NOx Emission Limit:

NSPS Limit = 121 ppm (see submittal by company for values of Y and F)
Manufacturer predicts 40 ppm NOx at low loads, and 25 ppm NOx at high loads. These limits yield a maximum potential of:

NOx	20.9 lb/hour	91.5 tons/year

Set limits at :	30 lb/hour	(equal to 131 tons per year)
	121 ppm	

Reason for limits: The main interest behind setting the limits at 30 lb/hour in addition to the NSPS standard is to limit annual emissions to less than 250 tons per year, making this a minor source for federal new source review regulations.

Attachment 2, Modeling Calculations and Results

Permit Action Number:
Date: 12/2/2003

Attachment 3, Approvals for Custom Fuel Monitoring Schedule

Permit Action Number:
Date: 12/2/2003