

AIR EMISSION PERMIT NO. 04700065- 001
Total Facility Operating Permit

IS ISSUED TO

Northern Natural Gas Company

NORTHERN NATURAL GAS - ALBERT LEA
S 7, T 104N, R 21W
Albert Lea, Freeborn County, MN 56007

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the Permit Applications Table.

Permit Applications Table

Permit Type	Application Date	Permit Action
Total Facility Operating Permit	4/28/2008	001

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 are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Unless otherwise indicated, all the Minnesota rules cited as the origin of the permit terms are incorporated into the SIP under 40 CFR § 52.1220 and as such as are enforceable by U.S. Environmental Protection Agency (EPA) Administrator or citizens under the Clean Air Act.

Permit Type: State; Limits to Avoid Pt 70

Operating Permit Issue Date: December 10, 2008

Expiration Date: Non-Expiring – Title I Conditions do not expire.

Don Smith, P.E., Manager
Air Quality Permits Section
Industrial Division

for Commissioner
Minnesota Pollution Control Agency

TABLE OF CONTENTS

Notice to the Permittee

Permit Shield

Facility Description

Table A: Limits and Other Requirements

Table B: Submittals

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:

Northern Natural Gas – Albert Lea is a natural gas compressor station. The facility operates a 119 MMBtu (15,596 Hp) natural gas fired turbine, used to compress natural gas in a pipeline. The turbine is subject to NSPS subpart KKKK. The facility also has a 4.45 MMBtu (617 Hp) emergency generator to power the turbine during power outages. The generator is subject to NSPS subpart IIII and is a 2007 model year or later with a displacement less than 10 liters per cylinder.

This permit authorizes the construction and operation of the facility. A state operating permit is required rather than a registration permit because the facility is subject to NSPS subpart KKKK.

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-1**

12/10/08

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 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
OPERATIONAL REQUIREMENTS	hdr
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
Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment. At a minimum, the O & M plan shall identify all air pollution control equipment and control practices and shall include a preventative maintenance program for the equipment and practices, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment and practices to proper operation to meet applicable permit conditions, a description of the employee training program for proper operation and maintenance of the control equipment and practices, and the records kept to demonstrate plan implementation.	Minn. R. 7007.0800, subps. 14 and 16(J)
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
Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010 - 7030.0080
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
PERFORMANCE TESTING	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, and/or B.	Minn. R. ch. 7017
Performance Test Notifications and Submittals: Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements. 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 - CD Copy: due 105 days after each Performance Test The Notification, Test Plan, and Test Report may be submitted in alternative format as allowed by Minn. R. 7017.2018.	Minn. R. 7017.2030, subp. 1-4; Minn. R. 7017.2018; and Minn. R. 7017.2035, subp. 1-2
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as stated in the MPCA's Notice of Compliance letter granting preliminary approval. Preliminary approval is based on formal review of a subsequent performance test on the same unit as specified by Minn. R. 7017.2025, subp. 3. The limit is final upon issuance of a permit amendment incorporating the change.	Minn. R. 7017.2025, subp. 3
MONITORING REQUIREMENTS	hdr
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment.	Minn. R. 7007.0800, subp. 4(D)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-2**

12/10/08

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 001

Operation of Monitoring Equipment: Unless otherwise noted in Tables A, and/or B, 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)
RECORDKEEPING	hdr
Recordkeeping: 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)
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp. 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp. 2), including records of the emissions resulting from those changes.	Minn. R. 7007.0800, subp. 5(B)
If the Permittee determines that no permit amendment or notification is required prior to making a change, the Permittee must retain records of all calculations required under Minn. R. 7007.1200. These records shall be kept for a period of five years from the date that the change was made. The records shall be kept at the stationary source for the current calendar year of operation and may be kept at the stationary source or office of the stationary source for all other years. The records may be maintained in either electronic or paper format.	Minn. R. 7007.1200, subp. 4
REPORTING/SUBMITTALS	hdr
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
Application for Permit Amendment: If a permit amendment is needed, submit an application in accordance with the requirements of Minn. R. 7007.1150 - Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 - 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)
Emission Inventory Report: due on or before April 1 of each calendar year following permit issuance. To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 - Minn. R. 7019.3100

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Northern Natural Gas - Albert Lea
Permit Number: 04700065 - 001

Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 - Minn. R. 7002.0095
---	---

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-4**

12/10/08

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 001

Subject Item: EU 001 Natural Gas-Fired Turbine**Associated Items:** SV 001 Natural Gas-Fired Turbine

What to do	Why to do it
EMISSION LIMITS	hdr
Nitrogen Oxides: less than or equal to 25 parts per million at 15 percent O ₂ or 150 ng/J of useful output (1.2 lb/MWh) when turbine is operating at or above 75 percent of peak load and when operating at 0°F or above.	40 CFR Section 60.4320(a) and 40 CFR pt. 60, subp. KKKK, Table 1
Sulfur Dioxide: less than or equal to 110 nanograms/joule heat input (0.90 lb/MWh) gross output or the Permittee must not burn any fuel in EU 001 which contains total potential sulfur emissions in excess of 26 ng SO ₂ /J (0.060 lb SO ₂ /MMBtu) heat input.	40 CFR Section 60.4330(a)
OPERATING REQUIREMENTS	hdr
Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standards.	40 CFR Section 60.8(c); Minn. R. 7017.2015, subp. 2(A)
The Permittee must operate and maintain EU 001, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including startup, shutdown, and malfunction.	40 CFR Section 60.4333(a)
MONITORING AND RECORDKEEPING REQUIREMENTS	hdr
Initial Performance Test: due 180 days after Initial Startup, but not later than 60 days after achieving the maximum production rate, to measure NO _x emissions in EU 001.	40 CFR Section 60.4340(a); 40 CFR Section 60.8
The Permittee shall perform annual performance tests in accordance with 40 CFR Section 60.4400 to demonstrate continuous compliance. If the NO _x emission result from the performance test is less than or equal to 75 percent of the NO _x emission limit in 40 CFR 60.4320(a) for the turbine, the Permittee may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO _x emission limit for the turbine, the Permittee must resume annual performance tests.	40 CFR Section 60.4340(a)
Fuel Sulfur Content: Notwithstanding the requirements of 63.4370(b), the permittee may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided below, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in 60.4330. (1) The two custom sulfur monitoring schedules below are acceptable, without prior Administrative approval: (i) The permittee shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in this subpart. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in paragraph (c)(1)(ii), (iii), or (iv) of this section, as applicable. cont'd	40 CFR Sections 60.4360 and 60.4370(c)(1)
(ii) If none of the 30 daily measurements of the fuel's total sulfur content exceeds half the applicable standard, subsequent sulfur content monitoring may be performed at 12-month intervals. If any of the samples taken at 12-month intervals has a total sulfur content greater than half but less than the applicable limit, follow the procedures in paragraph (iii) below. If any measurement exceeds the applicable limit, follow the procedures in paragraph (iv) below. (iii) If at least one of the 30 daily measurements of the fuel's total sulfur content is greater than half but less than the applicable limit, but none exceeds the applicable limit, then: (A) Collect and analyze a sample every 30 days for 3 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (iv) below. Otherwise, follow the procedures in paragraph (B) below. cont'd below	cont'd from above

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-5**

12/10/08

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 001

<p>(B) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, follow the procedures in paragraph (C) below.</p> <p>(C) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (iv) below. Otherwise, continue to monitor at this frequency.</p> <p>(iv) If a sulfur content measurement exceeds the applicable limit, immediately begin daily monitoring according to paragraph (i) above. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than the applicable limit, are obtained. At that point, the applicable procedures of paragraph (ii) or (iii) above shall be followed.</p> <p>cont'd below</p>	cont'd from above
<p>(2) The permittee may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to part 75 of this chapter to determine a custom sulfur sampling schedule:</p> <p>(i) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf, no additional monitoring of the sulfur content of the gas is required.</p> <p>(ii) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values exceeds half the applicable limit, then the minimum required sampling frequency shall be one sample at 12 month intervals.</p> <p>(iii) If any sample result exceeds half the applicable limit, but none exceeds the applicable limit, follow the provisions of paragraph (iii) above.</p> <p>(iv) If the sulfur content of any of the 720 hourly samples exceeds the applicable limit, follow the provisions of paragraph (iv) above.</p>	cont'd from above

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-6**

12/10/08

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 001

Subject Item: EU 002 Emergency Generator**Associated Items:** SV 002 Emergency Generator

What to do	Why to do it
STATE REQUIREMENTS	hdr
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 0.50 lbs/million Btu heat input . The potential to emit from this unit is 0.330 lb/MMBtu due to equipment design and allowable fuels.	Minn. R. 7011.2300, subp. 2
OPERATING CONDITIONS	hdr
Fuel type: No. 2 fuel oil	Minn. R. 7005.0100, subp. 35a
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 & 5
Fuel Supplier Certification: The Permittee shall obtain and maintain a fuel supplier certification for each shipment of distillate fuel oil, certifying that the sulfur content does not exceed 0.5% by weight.	Minn. R. 7007.0800, subps. 4 & 5
NESHAP ZZZZ REQUIREMENTS	hdr
The Permittee shall meet the requirements of 40 CFR Section 63 subpart ZZZZ by meeting the requirements of 40 CFR Section 60 subpart IIII, as an new emergency RICE at an area source of HAPs.	40 CFR 63.6590(c)
NSPS IIII REQUIREMENTS	hdr
EMISSION LIMITS	hdr
Exhaust Opacity: Less than or equal to: 1. 20 percent during the acceleration mode 2. 15 percent during the lugging mode; and 3. 50 percent during the peaks in either the acceleration or lugging modes.	40 CFR Section 60.4202(a)(2); 40 CFR 89.113(a)
Carbon Monoxide: less than or equal to 8.5 grams/horsepower-hour	40 CFR Section 60.4205(b); 40 CFR 89.113(a)
THC (Total Hydrocarbons): less than 1.0 grams/horsepower-hour	40 CFR Section 60.4205(b); 40 CFR 89.113(a)
Nitrogen Oxides: less than or equal to 6.9 grams/horsepower-hour	40 CFR Section 60.4205(b); 40 CFR 89.113(a)
Total Particulate Matter: less than or equal to 0.40 grams/horsepower-hour	40 CFR Section 60.4205(b); 40 CFR 89.113(a)
OPERATING CONDITIONS	hdr
Fuel Type: Diesel fuel must have a maximum sulfur content of 500 parts per million and either a minimum cetaine index of 40 or a maximum aromatic content of 35 volume percent.	40 CFR Section 60.4207(a); 40 CFR Section 60.4207(c); 40 CFR Section 80.510(a)
Fuel Type: Beginning October 1, 2010, diesel fuel must have a maximum sulfur content of 15 parts per million and either a minimum cetaine index of 40 or a maximum aromatic content of 35 volume percent. The Permittee may petition the Administrator for approval to use existing non-compliant diesel fuel inventories for up to six months or until exhausted, whichever comes first. If additional time is needed, the Permittee must submit a new application to the Administrator.	40 CFR Section 60.4207(b); 40 CFR Section 60.4207(c); 40 CFR Section 80.510(b)
Emission Standards: The Permittee shall operate and maintain the unit in accordance with the standards as required by the emission limits above, according to the manufacturer's written instructions, or according to procedures developed by the owner or operator that are approved by the engine manufacturer, for the entire life of the engine. Settings for the unit may not be changed unless permitted by the manufacturer.	40 CFR Section 60.4206; 40 CFR Section 60.4211(a)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-7**

12/10/08

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 001

<p>Operating Limitations: The Permittee may operate the emergency engine for the purpose of maintenance checks and readiness testing provided that the tests are recommended by Federal, State, or local government; the manufacturer; the vendor; or the insurance company associated with the engine. Maintenance checks and readiness testing for the emergency engines is limited to 100 hours per year. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that the Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year.</p> <p>There is no time limit on the use of emergency stationary ICE in emergency situations. Any operation other than emergency operation, maintenance, and testing, as permitted, is prohibited.</p>	40 CFR Section 60.4211(e)
MONITORING AND RECORDKEEPING	hdr
Monitoring - Hours of Operation: The engine shall contain a non-resettable hour meter prior to startup of the engine.	40 CFR Section 60.4209(a)
Compliance Demonstration: The Permittee must demonstrate compliance by purchasing an engine certified to conform with the emission standards listed in the emission limits above for the same model year and maximum engine power. The engine must be installed and configured according to manufacturer's specifications.	40 CFR Section 60.4211(c)
<p>Recordkeeping: The Permittee shall maintain records of the operation of the engine in emergency service that are recorded through the non-resettable hour meter. The record must include the time of operation and the reason the generator was in operation during that time.</p> <p>If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the permittee is not required to submit an initial notification.</p>	40 CFR Section 60.4214(b)

TABLE B: SUBMITTALS

B-1 12/10/08

Facility Name: Northern Natural Gas - Albert Lea
Permit Number: 04700065 - 001

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.

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

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 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

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

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.

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

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS**B-2** 12/10/08

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 001

What to send	When to send	Portion of Facility Affected
For each performance test used to demonstrate compliance with 40 CFR Section 60.4340(a), the Permittee shall submit a Performance Test Report	due 60 days after Performance Test	EU001
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup of EU 001.	EU001
Notification of the Date Construction Began	due 30 days after Start Of Construction of EU 001.	EU001
Testing Frequency Plan	<p>due 60 days after Initial Performance Test for NOx emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance.</p> <p>The Permittee shall perform annual performance tests in accordance with 40 CFR Section 60.4400 to demonstrate continuous compliance. If the NOx emission result from the performance test is less than or equal to 75 percent of the NOx emission limit in 40 CFR 60.4320(a) for the turbine, the Permittee may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit for the turbine, the Permittee must resume annual performance tests.</p>	EU001

TABLE B: RECURRENT SUBMITTALS**B-3** 12/10/08

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 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. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 31 days after end of each calendar year following Permit Issuance (for the previous calendar year). The Permittee shall submit this to the Commissioner on a form approved by the Commissioner. This report covers all deviations experienced during the calendar year.	Total Facility

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 04700065-001

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

1. General Information

1.1. Applicant and Stationary Source Location:

Applicant/Address	Stationary Source/Address (SIC Code: 4922)
Northern Natural Gas Company 1111 South 103 rd Omaha, Nebraska 68124	S 7, T 104N, R 21W Albert Lea Freeborn County
Contact: Greg Ammon Phone: 402-398-7716	

1.2. Description of the Facility

Northern Natural Gas – Albert Lea is a natural gas compressor station. The facility operates a 119 MMBtu (15,596 Hp) natural gas fired turbine, used to compress natural gas in a pipeline. The turbine is subject to NSPS subpart KKKK. The facility also has a 4.45 MMBtu (617 Hp) emergency generator to power the turbine during power outages. The generator is subject to NSPS subpart IIII and is a 2007 model year or later with a displacement less than 10 liters per cylinder.

1.3 Description of this Permit Action

This permit authorizes the construction and operation of the facility. A state operating permit is required rather than a registration permit because the facility is subject to NSPS subpart KKKK.

1.4. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary (tpy)

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC	Single HAP	All HAPs
Total Facility Limited Potential Emissions	3.46	3.46	2.09	32.52	31.98	18.29	0.37	0.59

Table 2. Facility Classification

Classification	Major/Affected Source	Synthetic Minor	Minor
PSD			X
Part 70 Permit Program			X
Part 63 NESHAP			X

2. Regulatory and/or Statutory Basis

New Source Review

The facility is a new minor source under New Source Review regulations.

Part 70 Permit Program

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

New Source Performance Standards (NSPS)

The facility is subject to:

- 40 CFR pt. 60, subp. IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (EU 002).
- 40 CFR pt. 60, subp. KKKK, Standards of Performance for Stationary Combustion Turbines (EU 001)

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility is a natural minor source of HAPs, but is subject to the Area Source NESHAP 40 CFR pt. 63 subp. ZZZZ, Stationary Reciprocating Internal Combustion Engines. However, EU 002 is a new emergency generator at an area source of HAPs and complies with ZZZZ by complying with the requirements of NSPS IIII.

Minnesota State Rules

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

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

Table 3. Regulatory Overview of Facility

EU, GP, or SV	Applicable Regulations	Comments:
EU 001	40 CFR pt. 60, subp. KKKK	Standards of Performance for Stationary Combustion Turbines
EU 002	40 CFR pt. 63, subp ZZZZ	NESHAP for Stationary Reciprocating Internal Combustion Engines
	40 CFR pt. 60, subp. IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
	Minn. R. 7011.2300	Standards of Performance for Stationary Internal Combustion Engines

3. Technical Information

3.1 Calculations of Potential to Emit

Attachment 1 to this TSD contains detailed spreadsheets and supporting information prepared by the MPCA and the Permittee.

3.2 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

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
EU 001	NO _x Limit: ≤ 25ppm (40 CFR § 60.4320(a)) SO ₂ Limit: ≤ 110 ng/J (40 CFR § 60.4330(a))	Notifications, performance testing, fuel certification.	Annual or bi-annual performance tests are required to demonstrate compliance with the NO _x Limit for NSPS KKKK.
EU 002	Opacity Limit: ≤ 20% SO ₂ Limit: ≤ 0.50 lbs/MMBtu (Minn. R. 7007.2300) Opacity Limit: ≤ 15/20/50% CO Limit: ≤ 8.5 g/hp-hr TCH Limit: ≤ 1.0 g/hp-hr NO _x Limit: ≤ 6.9 g/hp-hr PM Limit: ≤ 0.40 g/hp-hr (40 CFR § 60.4205(a))	Fuel certification, fuel type, hours of operation	This engine is a new engine at an area source of HAPs and complies with the NESHAP ZZZZ by complying with NSPS IIII.

3.3 Permit Organization

In general, the permit meets the MPCA Delta Guidance for ordering and grouping of requirements.

3.4 Comments Received

Public Notice Period: 10/04/2008 – 11/03/2008

EPA 45-day Review Period: 10/04/2008 – 11/17/2008

Comments were not received from the public during the public notice period.

4. Conclusion

Based on the information provided by Northern Natural Gas – Albert Lea, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 04700065-001, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team:	Chris Buntjer (permit writer/engineer)
	Brent Rohne (enforcement)
	Sean O’Conner (stack testing)
	Trevor Shearen (peer reviewer)

AQ File No. 04700065; DQ 2028

Attachments: 1. PTE Summary Calculation Spreadsheets
 2. Facility Description and CD-01 Forms