AIR EMISSION PERMIT NO. 04700065-002
Administrative Amendment

IS ISSUED TO

Northern Natural Gas Co

NORTHERN NATURAL GAS - ALBERT LEA
73650 325th Street
Hartland, Freeborn County, Minnesota 56042

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

This permit amendment supersedes Air Emission Permit No. 04700065-001, and authorizes the Permittee to 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 Permit; Nonmajor for Part 70/True Minor for NSR
Operating Permit Issue Date: December 10, 2008
Major Amendment Issue Date: January 20, 2015
Expiration Date: Permit does not expire – Title I Conditions do not expire.

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

for John Linc Stine
Commissioner
Minnesota Pollution Control Agency

Permit Applications Table

Permit Type	Application Date	Permit Action
Total Facility Operating Permit	4/28/2008	001
Administrative Amendment	11/12/2010	002
Reopening	MPCA Reopening	002

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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:

Northern Natural Gas – Albert Lea is a natural gas compressor station. The facility operates a 119 MMBtu (15,596 hp) natural gas fired turbine (EU 001), used to compress natural gas in a pipeline. The turbine is subject to 40 CFR pt. 60, subpart KKKK. The facility also has a 4.37 MMBtu (619 hp) diesel emergency generator (EU 002) to power the turbine during power outages. The generator is subject to 40 CFR pt. 60, subpart IIII. The engine is a 2007 model year or later with a displacement less than 10 liters per cylinder.

AMENDMENT DESCRIPTION:

Permit Action 002 incorporates a reopening and an administrative amendment.

The MPCA-initiated reopening under Minn. R. 7007.1600, subp. 1(C) is needed to correct a material mistake in the permit. The emergency generator (EU 002) is subject to 40 CFR pt. 60, subpart IIII. Incorrect emissions limits were placed in the permit. The correct applicable limits for the engine are incorporated through this permit action.

This permit action also includes an administrative amendment to correct typographical errors in the current permit. The changes are allowed through an administrative amendment under Minn. R. 7007.1400, subp. 1(A).

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

Table A contains limits and other requirements with which your facility must comply. The limits are located in the first column of the table (What To do). The limits can be emission limits or operational limits. This column also contains the actions that you must take and the records you must keep to show that you are complying with the limits. The second column of Table A (Why to do it) lists the regulatory basis for these limits. Appendices included as conditions of your permit are listed in Table A under total facility requirements.

Subject Item: **Total Facility**

What to do	Why to do it
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; 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

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment.	Minn. R. 7007.0800, subp. 4(D)
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. For nonexpiring permits, 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

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

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
Emission Fees: due 30 days after receipt of an MPCA bill.	Minn. R. 7002.0005 - Minn. R. 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

Subject Item: **EU 001 Natural Gas-Fired Turbine - 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 O2 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); 40 Section CFR 63, subp. KKKK, Table 2d
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 SO2/J (0.060 lb SO2/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
Performance Test: due before 02/11/2016 to measure NOx, in accordance with 40 CFR Section 60.8 and 40 CFR Section 60.4400. 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 (no more than 14 calendar months following the previous performance test).	40 CFR Section 60.4340(a); 40 CFR Section 60.8
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 below	40 CFR Section 60.4360; 40 CFR Section 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	40 CFR Section 60.4360; 40 CFR Section 60.4370(c)(1)

(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. (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. (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. cont'd below	40 CFR Section 60.4360; 40 CFR Section 60.4370(c)(1)
(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: (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. (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. (iii) If any sample result exceeds half the applicable limit, but none exceeds the applicable limit, follow the provisions of paragraph (iii) above. (iv) If the sulfur content of any of the 720 hourly samples exceeds the applicable limit, follow the provisions of paragraph (iv) above.	40 CFR Section 60.4360; 40 CFR Section 60.4370(c)(1)

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

Subject Item: **EU 002 Emergency Generator - Reciprocating IC Engine**

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 . This is less stringent than the limit under 40 CFR Section 60.4207(b) which also applies.	Minn. R. 7011.2300, subp. 2
OPERATING CONDITIONS	hdr
Fuel type: No. 2 fuel oil/diesel fuel	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 0.0015% 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); Minn. R. 7011.8150
NSPS IIII REQUIREMENTS	hdr
EMISSION LIMITS	hdr
Opacity: less than or equal to 20 percent opacity (exhaust) during the acceleration mode; 15 percent during the lugging mode; and 50 percent during the peaks in either the acceleration or lugging modes.	40 CFR Section 60.4202(a)(2); 40 CFR 89.113(a); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150
Carbon Monoxide: less than or equal to 3.5 grams/kilowatt-hour	40 CFR Section 60.4205(b); 40 CFR 89.112(a); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150
NMHC+NOx: less than or equal to 4.0 grams/kilowatt-hour	40 CFR Section 60.4205(b); 40 CFR 89.112(a); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150
Total Particulate Matter: less than or equal to 0.20 grams/kilowatt-hour	40 CFR Section 60.4205(b); 40 CFR 89.112(a); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150
OPERATING CONDITIONS	hdr
Sulfur Content of Fuel: less than or equal to 15 parts per million for NR diesel fuel. Cetane index or aromatic content: (i) a minimum cetane index of 40, or (ii) a maximum aromatic content of 35 volume percent. Any existing fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.	40 CFR Section 60.4207(b); 40 CFR Section 80.510(b); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150
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); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

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. 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.	40 CFR Section 60.4211(e); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150
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); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150
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); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150
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. If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the permittee is not required to submit an initial notification.	40 CFR Section 60.4214(b); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150
GENERAL PROVISIONS FOR NSPS IIII	hdr
The Permittee shall comply with the General Provisions in 40 CFR Section 60.1 through 60.19, as applicable. General Provisions for 60.7(a)(4) and 60.7(b) are specified below.	40 CFR Section 60.4218; 40 CFR Section 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150
No owner or operator shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard.	40 CFR Section 60.12; Minn. R. 7011.0050
NOTIFICATIONS (GENERAL PROVISIONS)	hdr
The Permittee shall submit a notification of any physical or operational change which increases emission rate: due 60 days (or as soon as practical) before the change is commenced.	40 CFR Section 60.7(a)(4); Minn. R. 7019.0100, subp. 1
RECORDKEEPING (GENERAL PROVISIONS)	hdr
Recordkeeping: Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility including; 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(b), Minn. R. 7019.0100, subp. 1
Recordkeeping: Maintain a file of all measurements, maintenance, reports and records for at least five years. 40 CFR Section 60.7(f) specifies two years.	Minn. R. 7007.0800, subp. 5(C); Minn. R. 7019.0100, subp. 1; 40 CFR Section 60.7(f)

TABLE B: SUBMITTALS

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

Also, where required by an applicable rule or permit condition, send to the Permit Document Coordinator notices of:
- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

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

Chief Air Enforcement
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Send any application for a permit or permit amendment to:

Fiscal Services
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

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

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

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

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

TABLE B: RECURRENT SUBMITTALS

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each 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. 04700065-002

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

1. General Information

1.1 Applicant and Stationary Source Location:

Table 1. Applicant and Source Address

Applicant/Address	Stationary Source/Address (SIC Code: 4922)
Northern Natural Gas 1111 S 103rd St Omaha, NE 68124	Northern Natural Gas - Albert Lea 73650 325th St Hartland Freeborn County, Minnesota 56042
Contact: Mr. Greg Ammon Phone:402-398-7716	

1.2 Facility Description

Northern Natural Gas – Albert Lea is a natural gas compressor station. The Permittee operates a 119 MMBtu (15,596 hp) natural gas fired turbine (EU 001) to compress natural gas in a pipeline. The turbine is subject to 40 CFR pt. 60, subp. KKKK. The facility has a 4.37 MMBtu (619 hp) emergency generator (EU 002) used to power the turbine during power outages. The generator is subject to 40 CFR pt. 60, subp. IIII and 40 CFR pt. 63, subp. ZZZZ.

1.3 Description of the Activities Allowed by this Permit Action

This permit action incorporates the following MPCA-initiated permit reopening and administrative amendment.

October 24, 2014—MPCA Permit Reopening (DQ# 4975)

The MPCA-initiated reopening is authorized under Minn. R. 7007.1600, subp. 1(C) to correct a material mistake in the permit. The incorrect emissions limits for 40 CFR pt. 60, subpart IIII were placed in the permit for EU 002. The limits were taken from Table 1 of 40 CFR pt. 60, subp. IIII. The emission limits in this table do not apply to the engine based on its model year and engine power rating. The reopening includes the correct limits from 40 CFR § 89.112(a), incorporated in 40 CFR § 60.4205(b). This is a material mistake in the permit which can be corrected through a mandatory reopening under Minn. R. 7007.1600, subp. 1(C). The correct emission limits and citations have been placed in the permit. Attachment 4 of this Technical Support Document contains a copy of the letter notifying the Permittee of the MPCA's intention to reopen the permit as required under Minn. R. 7007.1600, subp. 3.

November 12, 2010—Administrative Amendment Application (DQ# 3304)
This permit action corrects typographical errors in the current permit. In the permit application for permit action 001, an emergency generator (EU 002) rated at 755 horsepower was to be installed. Prior to the permit being issued, Northern Natural Gas requested that an emergency generator, rated at 619 horsepower, be used in place of the 755 horsepower generator. The emergency generator rated at 619 horsepower was installed at the facility, but the permit language and emission calculations use the 755 horsepower emergency generator. In accordance with Minn. R. 7007.0600, subp. 1, the complete application contained emission unit information, emission calculations, and supporting material for the 619 horsepower engine. The emission calculations were slightly changed with this amendment. They are located in Attachment 1 to this TSD. The facility description is updated through this permit action. This change is allowed through an administrative amendment by Minn. R. 7007.1400, subp. 1(A).

Other changes to the permit, allowed under the administrative amendment or reopening process, include:

- Removing one time submittal requirements for EU 001. This is allowed under Minn. R. 7007.1400, subp. 1(D);
- Updating the Test Frequency Plan requirement for EU 001 to include current test frequency allowed under 40 CFR pt. 60, subp. KKKK. This is allowed under Minn. R. 7007.1400, subp. 1(C);
- Adding requirements for general provisions for EU 002 for 40 CFR pt. 60, subp. IIII. This is allowed under Minn. R. 7007.1400m subp. 1(C);
- Changing the fuel certification requirement of EU 002 to correspond with the fuel sulfur content requirement;
- Adding citations for applicable requirements for state rules incorporating NESHAP and NSPS requirements (Minn. R. 7011.2305, Minn. R. 7011.8150). This is allowed under Minn. R. 7007.1400, subp. 1(J); and
- Updating citations and adding language to emission unit description in the Delta Facility Description that will help with MPCA data migration to a new database.

1.4 Facility Emissions

There are no emissions increases authorized with this permit action.

Table 2. Facility Classification

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

2. Regulatory and/or Statutory Basis

New Source Review
The facility is not a major source under New Source Review regulations. No changes in operations are authorized by this permit.

Part 70 Permit Program
The facility is a nonmajor source under the Part 70 permit program.

New Source Performance Standards (NSPS)

The emergency generator (EU 002) is subject to 40 CFR pt. 60, subp. IIII—Standards of Performance for Compression Ignition Stationary Internal Combustion Engines. The natural gas-fired turbine (EU 001) is subject to 40 CFR pt. 60, subp. KKKK—Standards of Performance for Stationary Combustion Turbines.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The facility is an area source of Hazardous Air Pollutants (HAPs). EU 002 is subject to the area source 40 CFR pt. 63, subp. ZZZZ—Stationary Combustion Engines. EU 002 complies with the NESHAP by complying with the requirements of 40 CFR pt. 60, subp. 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 Units Affected by the Permit Action

Subject Item*	Applicable Regulations	Rationale
EU 002 (Emergency Generator)	40 CFR pt. 63, subp. ZZZZ; 40 CFR pt. 60, subp. IIII; Minn. R. 7011.8150; Minn. R. 7011.2305	National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. Determination of applicable limits from the rule: • Unit is located at an area source of HAPs • Owner or operator of unit commenced construction after June 12, 2006 • Unit is a stationary Compression Ignition Engine Standards of Performance for Stationary Internal Combustion Engines. Determination of applicable limits from the rule: • Unit is 2007 model year or later • Unit has displacement < 10 liters/cylinder • Unit is a an emergency stationary internal combustion engine • Unit is not a fire pump engine • Unit is rated at 619 hp

3. Technical Information

3.1 Calculations of Potential to Emit

The correct emission calculations were in the final certified application for the original permit; however the emission rates were not uploaded into the MPCA database correctly. These updates have been made in the MPCA database and the calculations are in Attachment 1 to this TSD.

3.2 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. There are no additional monitoring requirements associated with this permit action. Table 4 discusses updated monitoring requirements.

Table 4. Monitoring

Subject Item*	Requirement (rule basis)	Monitoring	Discussion
EU 001 (Natural Gas-Fired Turbine)	NOx: ≤ 25 ppm at 15% O_2 (NSPS limit) Sulfur Content of Fuel: ≤ 15 ppm (NSPS limit)	Performance Testing for NOx	The performance testing frequency for EU 001 was updated with this permit action. Based on the results of the performance test for NOX, the periodic performance testing may occur annual or biannually. The most recent performance test occurred on December 12, 2013. The NOx emissions were less than then 75% of the limit in 40 CFR § 60.4340(a). Therefore, the next performance test shall be completed within 790 days of December 12, 2013. If the NOx emissions were greater than 75% of the limit, the next performance test would have been due within 395 days of December 12, 2013. The sulfur content of fuel limit has been updated to match the current regulations. Until October 1, 2010, the sulfur content of fuel limit was 500 ppm. The permit contained both limits. The old limit was removed and the citations and requirement language were updated for the current limit. According to 40 CFR §60.4207 the Permittee may use existing fuel purchased prior to October 1, 2010 until it is depleted. As of December 2, 2014 the Permittee had 900 gallons of fuel purchased prior to October 1, 2010.

3.3 Comments Received

According to Minn. R. 7007.1600, subp. 3, a reopened permit will be processed similar to a major amendment. A public notice and EPA 30-day review period is needed before issuance of the permit. In accordance with Minn. R. 7007.0950, a major amendment to a state permit requires a EPA 30-day review period.

Public Notice Period: December 16, 2014 – January 14, 2015
EPA 45-day Review Period: December 16, 2014 – January 14, 2015

Comments were not received from the public during the public notice period. The EPA had no comments on this permit.

4. Permit Fee Assessment

There are no additional points associated with the administrative amendment. The reopening does not result in any application or additional points.

5. Conclusion

Based on the information provided by Northern Natural Gas, the MPCA has reasonable assurance that the operation of the emission facility, as described in the Air Emission Permit No. 04700065-002 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Zachary Tauer (permit engineer)
Cory Boeck (enforcement)
Marc Severin (compliance)
Sarah Sevcik (peer reviewer)
Beckie Olson (permit writing assistant)
Laurie O'Brien (administrative support)

AQ File No. 624J; DQ 3304, 4975

Attachments:
1. Corrected PTE Calculation Spreadsheets
2. Facility Description and CD-01 Forms
3. MPCA Letter Initiating Reopening

Attachment 1 – Updated Potential to Emit Calculations
Northern Natural Gas – Albert Lee 04700065-002

Generator (EU 002)

EU 002
Fuel: Distillate Fuel Oil

4.45	MMBtu/hour	Engine Size	619 bhp
2225	MMBtu/year		453.5924 g/lb
140,000	Btu/gallon of oil		
31.78571429	gallon/hour		
0.14	MMBtu/gallon		
0.031785714	1000 gal/hr		

Limits:	8760	hr/year fuel oil =	278442.8571
	0.002	lb SOx / MMBtu (fuel oil)	278.4428571 gal/year fuel oil
	1.070	lb NOx / MMBtu (fuel oil)	1000 gal/yr
	500	hour/year operation	
	0.0015%	sulfur content (%)	

Distillate Fuel Oil						
	PM	**PM10**	**PM2.5**	**SO2**	**NOx**	**VOC**
Emission Factor g/hp-hr	0.034	0.034	0.034	0.006	3.49	0.040
lbs/hr	0.05	0.05	0.05	0.01	4.76	0.05
Uncontrolled (tpy)	0.01	0.01	0.01	0.00	1.19	0.01
Limited (tpy)	0.01	0.01	0.01	0.00	1.19	0.01

SO2: Source - AP 42 Section 3.4-1
NOx, CO, PM, PM10, VOC: Source - Manufacturer Specs

HAPs		Emission Factor	Lbs/hr	Uncontrolled (tpy)	Limited (tpy)
Acetaldehyde		7.67E-04	3.41E-03	1.49E-02	8.53E-04
Acrolein		9.25E-05	4.12E-04	1.80E-03	1.03E-04
Benzene		9.33E-04	4.15E-03	1.82E-02	1.04E-03
Formaldehyde		1.18E-03	5.25E-03	2.30E-02	1.31E-03
PAH		1.68E-04	7.48E-04	3.27E-03	1.87E-04
Toluene		4.09E-04	1.82E-03	7.97E-03	4.55E-04
Xylenes		2.85E-04	1.27E-03	5.55E-03	3.17E-04
Total HAPs				7.47E-02	4.27E-03
Single HAP	Formaldehyde			2.30E-02	1.31E-03

Limits: NSPS IIII			
Pollutant	**g/kw-hr**	**g/hp-hr**	**lbs/kw-hr**
HC	1.3	1	0.002866009
Nox	9.2	6.9	0.020282527
CO	11.4	8.5	0.025132696
PM	0.54	0.4	0.001190496

Attachment 2 – Facility Description and CD-01 Forms
Northern Natural Gas – Albert Lee 04700065-002

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: STACK/VENTS (SV)

Show: Active and Pending Records
Action: PER 002
AQD Facility ID: 04700065
Facility Name: Northern Natural Gas - Albert Lea

	ID No.	Stack/ Vent Status	Added By (Action)	Retired By (Action)	Operator ID for Item	Operators Description	Height of Opening From Ground (feet)	Inside Dimensions		Design Flow Rate at Top (ACFM)	Exit Gas Temperature at Top (°F)	Flow Rate/ Temperature Information Source	Discharge Direction
								Diameter or Length (feet)	Width (feet)				
1	SV 001	Active	PER 001			Natural Gas-Fired Turbine	61.33	7.6	7.6	46,500	910	Manufacturer	Up, No Cap
2	SV 002	Active	PER 001			Emergency Generator	21	0.5		3,655	910	Manufacturer	Up, No Cap

MINNESOTA POLLUTION CONTROL AGENCY
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ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: EMISSION UNIT (EU)

Show: Active and Pending Records
Action: PER 002
AQD Facility ID: 04700065
Facility Name: Northern Natural Gas - Albert Lea

	ID No.	Emission Unit Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Stack/ Vent ID No(s).	Control Equip. ID No(s).	Operator Description	Manufacturer	Model Number	SIC	Max. Design Capacity	Maximum Design Capacity		Max Fuel Input (mil Btu)
														Materials	Units n Units d	
1	EU 001	Active	PER 001		☐		SV 001 (M)		Natural Gas-Fired Turbine	Solar Turbines, Inc.	Mars 100-S	4922	15,596		Hp	119
2	EU 001	Active	PER 002		☐		SV 001 (M)		Natural Gas-Fired Turbine - Turbine	Solar Turbines, Inc.	Mars 100-S	4922	15,596		Hp	119
3	EU 002	Active	PER 001		☐		SV 002 (M)		Emergency Generator	Caterpillar	C15	4922	617		Hp	4.45
4	EU 002	Active	PER 002		☐		SV 002 (M)		Emergency Generator - Reciprocating IC Engine	Caterpillar	C15	4922	619		Hp	4.45

FACILITY DESCRIPTION: EMISSION UNIT (EU)

	ID No.	Emission Unit Status	Added By (Action)	Comm-ence Const. Date	Initial Startup Date	Removal Date	Firing Method	Pct. Fuel/ Space Heat	Bottleneck	Elevator Type
1	EU 001	Active	PER 001							
2	EU 001	Active	PER 002	06/16/2009	11/04/2009					
3	EU 002	Active	PER 001							
4	EU 002	Active	PER 002							

MINNESOTA POLLUTION CONTROL AGENCY
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ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: FUGITIVE SOURCES (FS)

Show: Active and Pending Records
Action: PER 002
AQD Facility ID: 04700065
Facility Name: Northern Natural Gas - Albert Lea

	ID No.	Fugitive Source Status	Added By (Action)	Retired By (Action)	Insignif-icant Activity	Operator ID for Item	Pollutant(s) Emitted	Control Equip. ID No(s).	Fugitive Source Description	Year Installed	Year Removed
1	FS 001	Active	PER 001		☐		VOC		60 Valves		
2	FS 001	Active	PER 002		☐		VOC		60 Valves - Equipment Leaks		
3	FS 002	Active	PER 001		☐		VOC		1 Compressor Seal		
4	FS 002	Active	PER 002		☐		VOC		1 Compressor Seal - Equipment Leaks		
5	FS 003	Active	PER 001		☐		VOC		115 Flanges		
6	FS 003	Active	PER 002		☐		VOC		115 Flanges - Equipment Leaks		

MINNESOTA POLLUTION CONTROL AGENCY
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520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

2 December, 2014 12:25

FACILITY DESCRIPTION: Potential-to-emit (by item)

Show: Active and Pending Records
AQD Facility ID: 04700065
Facility Name: Northern Natural Gas - Albert Lea

Item	Pollutant	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
EU 001							
	Acetaldehyde	PER 001		4.77E-03	2.09E-02	2.09E-02	2.09E-02
	Acrolein	PER 001		7.63E-04	3.34E-03	3.34E-03	3.34E-03
	Benzene	PER 001		1.43E-03	6.27E-03	6.27E-03	6.27E-03
	Carbon Monoxide	PER 001		7.27E+00	3.19E+01	3.19E+01	3.19E+01
	Ethylbenzene	PER 001		3.82E-03	1.67E-02	1.67E-02	1.67E-02
	Formaldehyde	PER 001		8.47E-02	3.71E-01	3.71E-01	3.71E-01
	Naphthalene	PER 001		1.55E-02	6.79E-02	6.79E-02	6.79E-02
	HAPs - Total	PER 001			5.87E-01	5.87E-01	5.87E-01
	Toluene	PER 001		1.55E-02	6.79E-02	6.79E-02	6.79E-02
	Xylenes (mixed isomers)	PER 001		7.63E-03	3.34E-02	3.34E-02	3.34E-02
	Nitrogen Oxides	PER 001		7.15E+00	3.13E+01	3.13E+01	3.13E+01
	PM < 10 micron	PER 001		7.90E-01	3.45E+00	3.45E+00	3.45E+00
	Total Particulate Matter	PER 001		7.90E-01	3.45E+00	3.45E+00	3.45E+00
	Sulfur Dioxide	PER 001		4.10E-01	1.78E+00	1.78E+00	1.78E+00
	Volatile Organic Compounds	PER 001		4.17E+00	1.83E+01	1.83E+01	1.83E+01
EU 002							
	Acetaldehyde	PER 001		2.22E-03	9.74E-03	5.56E-04	5.56E-04
	Acetaldehyde	PER 002		3.41E-03	8.53E-04	8.53E-04	8.53E-04
	Acrolein	PER 001		2.68E-04	1.17E-03	6.71E-05	6.71E-05
	Acrolein	PER 002		4.12E-04	1.03E-04	1.03E-04	1.03E-04
	Benzene	PER 001		2.71E-03	1.19E-02	6.76E-04	6.76E-04
	Benzene	PER 002		4.15E-03	1.04E-03	1.04E-03	1.04E-03
	Carbon Monoxide	PER 001		2.20E-01	9.70E-01	6.00E-02	6.00E-02
	Carbon Monoxide	PER 002		4.80E-01	1.20E-01	1.20E-01	1.20E-01
	Formaldehyde	PER 001		3.42E-03	1.50E-02	8.56E-04	8.56E-04
	Formaldehyde	PER 002		5.25E-03	1.31E-03	1.31E-03	1.31E-03
	HAPs - Total	PER 001			4.87E-02	2.78E-03	2.78E-03
	HAPs - Total	PER 002			4.27E-03	4.27E-03	4.27E-03
	Toluene	PER 001		1.19E-03	5.20E-03	2.97E-04	2.97E-04
	Toluene	PER 002		1.82E-03	4.55E-04	4.55E-04	4.55E-04
	Xylenes (mixed isomers)	PER 001		8.27E-04	3.62E-03	2.07E-04	2.07E-04
	Xylenes (mixed isomers)	PER 002		1.27E-03	3.17E-04	3.17E-04	3.17E-04
	Nitrogen Oxides	PER 001		3.64E+00	1.60E+01	9.10E-01	9.10E-01
	Nitrogen Oxides	PER 002		4.76E+00	1.19E+00	1.19E+00	1.19E+00
	PM < 2.5 micron	PER 002		5.00E-02	1.00E-02	1.00E-02	1.00E-02
	PM < 10 micron	PER 001		3.00E-02	1.30E-01	1.00E-02	1.00E-02
	PM < 10 micron	PER 002		5.00E-02	1.00E-01	1.00E-01	1.00E-01
	Total Particulate Matter	PER 001		3.00E-02	1.30E-01	1.00E-02	1.00E-02
	Total Particulate Matter	PER 002		5.00E-02	1.00E-01	1.00E-02	1.00E-02
	Sulfur Dioxide	PER 001		8.20E-01	3.61E+00	2.10E-01	2.10E-01
	Sulfur Dioxide	PER 002		7.51E-03	1.80E-03	1.80E-03	1.80E-03
	Volatile Organic Compounds	PER 001		5.00E-02	2.30E-01	1.00E-02	1.00E-02
	Volatile Organic Compounds	PER 002		5.00E-02	1.00E-02	1.00E-02	1.00E-02
FS 001							
	Volatile Organic Compounds	PER 001		1.80E-01	7.80E-01	7.80E-01	7.80E-01

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

FACILITY DESCRIPTION: Potential-to-emit (by item)

Show: Active and Pending Records
AQD Facility ID: 04700065
Facility Name: Northern Natural Gas - Albert Lea

Item	Pollutant	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
FS 002							
	Volatile Organic Compounds	PER 001		7.00E-02	3.10E-01	3.10E-01	3.10E-01
FS 003							
	Volatile Organic Compounds	PER 001		3.00E-03	1.00E-02	1.00E-02	1.00E-02

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

2 December, 2014 12:25

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 04700065
Facility Name: Northern Natural Gas - Albert Lea

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Acetaldehyde							
	EU 001	PER 001		4.770E-03	2.090E-02	2.090E-02	2.090E-02
	EU 002	PER 001		2.220E-03	9.740E-03	5.560E-04	5.560E-04
	EU 002	PER 002		3.410E-03	8.530E-04	8.530E-04	8.530E-04
Totals					2.175E-02	2.175E-02	2.175E-02
Acrolein							
	EU 001	PER 001		7.630E-04	3.340E-03	3.340E-03	3.340E-03
	EU 002	PER 001		2.680E-04	1.170E-03	6.710E-05	6.710E-05
	EU 002	PER 002		4.120E-04	1.030E-04	1.030E-04	1.030E-04
Totals					3.443E-03	3.443E-03	3.443E-03
Benzene							
	EU 001	PER 001		1.430E-03	6.270E-03	6.270E-03	6.270E-03
	EU 002	PER 001		2.710E-03	1.190E-02	6.760E-04	6.760E-04
	EU 002	PER 002		4.150E-03	1.040E-03	1.040E-03	1.040E-03
Totals					7.310E-03	7.310E-03	7.310E-03
Carbon Monoxide							
	EU 001	PER 001		7.270E+00	3.186E+01	3.186E+01	3.186E+01
	EU 002	PER 001		2.200E-01	9.700E-01	6.000E-02	6.000E-02
	EU 002	PER 002		4.800E-01	1.200E-01	1.200E-01	1.200E-01
Totals					3.198E+01	3.198E+01	3.198E+01
Ethylbenzene							
	EU 001	PER 001		3.820E-03	1.670E-02	1.670E-02	1.670E-02
Totals					0.000E+00	0.000E+00	0.000E+00
Formaldehyde							
	EU 001	PER 001		8.470E-02	3.710E-01	3.710E-01	3.710E-01
	EU 002	PER 001		3.420E-03	1.500E-02	8.560E-04	8.560E-04
	EU 002	PER 002		5.250E-03	1.310E-03	1.310E-03	1.310E-03
Totals					3.723E-01	3.723E-01	3.723E-01
Naphthalene							
	EU 001	PER 001		1.550E-02	6.790E-02	6.790E-02	6.790E-02
Totals					0.000E+00	0.000E+00	0.000E+00
HAPs - Total							
	EU 001	PER 001		0.000E+00	5.870E-01	5.870E-01	5.870E-01
	EU 002	PER 001		0.000E+00	4.870E-02	2.780E-03	2.780E-03
	EU 002	PER 002		0.000E+00	4.270E-03	4.270E-03	4.270E-03
Totals					5.913E-01	5.913E-01	5.913E-01

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 04700065
Facility Name: Northern Natural Gas - Albert Lea

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Toluene							
	EU 001	PER 001		1.550E-02	6.790E-02	6.790E-02	6.790E-02
	EU 002	PER 001		1.190E-03	5.200E-03	2.970E-04	2.970E-04
	EU 002	PER 002		1.820E-03	4.550E-04	4.550E-04	4.550E-04
Totals					6.836E-02	6.836E-02	6.836E-02
Xylenes (mixed isomers)							
	EU 001	PER 001		7.630E-03	3.340E-02	3.340E-02	3.340E-02
	EU 002	PER 001		8.270E-04	3.620E-03	2.070E-04	2.070E-04
	EU 002	PER 002		1.270E-03	3.170E-04	3.170E-04	3.170E-04
Totals					3.372E-02	3.372E-02	3.372E-02
Nitrogen Oxides							
	EU 001	PER 001		7.150E+00	3.134E+01	3.134E+01	3.134E+01
	EU 002	PER 001		3.640E+00	1.595E+01	9.100E-01	9.100E-01
	EU 002	PER 002		4.760E+00	1.190E+00	1.190E+00	1.190E+00
Totals					3.134E+01	3.134E+01	3.134E+01
PM < 2.5 micron							
	EU 002	PER 002		5.000E-02	1.000E-02	1.000E-02	1.000E-02
Totals					1.000E-02	1.000E-02	1.000E-02
PM < 10 micron							
	EU 001	PER 001		7.900E-01	3.450E+00	3.450E+00	3.450E+00
	EU 002	PER 001		3.000E-02	1.300E-01	1.000E-02	1.000E-02
	EU 002	PER 002		5.000E-02	1.000E-01	1.000E-01	1.000E-01
Totals					3.550E+00	3.550E+00	3.550E+00
Total Particulate Matter							
	EU 001	PER 001		7.900E-01	3.450E+00	3.450E+00	3.450E+00
	EU 002	PER 001		3.000E-02	1.300E-01	1.000E-02	1.000E-02
	EU 002	PER 002		5.000E-02	1.000E-01	1.000E-02	1.000E-02
Totals					3.550E+00	3.460E+00	3.460E+00
Sulfur Dioxide							
	EU 001	PER 001		4.100E-01	1.780E+00	1.780E+00	1.780E+00
	EU 002	PER 001		8.200E-01	3.610E+00	2.100E-01	2.100E-01
	EU 002	PER 002		7.510E-03	1.800E-03	1.800E-03	1.800E-03
Totals					1.782E+00	1.782E+00	1.782E+00
Volatile Organic Compounds							
	EU 001	PER 001		4.170E+00	1.828E+01	1.828E+01	1.828E+01
	EU 002	PER 001		5.000E-02	2.300E-01	1.000E-02	1.000E-02
	EU 002	PER 002		5.000E-02	1.000E-02	1.000E-02	1.000E-02

FACILITY DESCRIPTION: Potential-to-emit (by pollutant)

Show: Active and Pending Records
AQD Facility ID: 04700065
Facility Name: Northern Natural Gas - Albert Lea

Pollutant	Item	Added By (Action)	Retired By (Action)	Hourly Potential (lbs per hr)	Unrestricted Potential (tons per yr)	Limited Potential (tons per yr)	Actual Emissions (tons per yr)
Volatile Organic Compounds							
	FS 001	PER 001		1.800E-01	7.800E-01	7.800E-01	7.800E-01
	FS 002	PER 001		7.000E-02	3.100E-01	3.100E-01	3.100E-01
	FS 003	PER 001		3.000E-03	1.000E-02	1.000E-02	1.000E-02
Totals					1.939E+01	1.939E+01	1.939E+01

MINNESOTA POLLUTION CONTROL AGENCY
AIR QUALITY
520 LAFAYETTE ROAD
ST. PAUL, MN 55155-4194

2 Dec, 2014 10:46

COMPLIANCE PLAN CD-01

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

Subject Item: **Total Facility**

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	OPERATIONAL REQUIREMENTS
2.0		CD	Minn. R. 7011.0020	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.
3.0		CD	Minn. R. 7007.0800, subp. 2; Minn. R. 7007.0800, subp. 16(J)	Air Pollution Control Equipment: Operate all pollution control equipment whenever the corresponding process equipment and emission units are operated.
4.0		CD	Minn. R. 7007.0800, subps. 14 and 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.
5.0		CD	Minn. R. 7019.1000, subp. 4	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.
6.0		CD	Minn. R. 7011.0150	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.
7.0		CD	Minn. R. 7030.0010 - 7030.0080	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.
8.0		CD	Minn. R. 7007.0800, subp. 9(A)	Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).
9.0		CD	Minn. R. 7007.0800, subp. 16	The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.
10.0		CD	hdr	PERFORMANCE TESTING
11.0		CD	Minn. R. ch. 7017	Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, and/or B.
12.0		CD	Minn. R. 7017.2030, subp. 1-4; Minn. R. 7017.2018; Minn. R. 7017.2035, subp. 1-2	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.
13.0		CD	Minn. R. 7017.2025, subp. 3	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.
14.0		CD	hdr	MONITORING REQUIREMENTS
15.0		CD	Minn. R. 7007.0800, subp. 4(D)	Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment.

COMPLIANCE PLAN CD-01

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

16.0		CD	Minn. R. 7007.0800, subp. 4(D)	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.
17.0		CD	hdr	RECORDKEEPING
18.0		CD	Minn. R. 7007.0800, subp. 5(C)	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).
19.0		CD	Minn. R. 7007.0800, subp. 5(B)	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.
20.0		CD	Minn. R. 7007.1200, subp. 4	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. For nonexpiring permits, 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.
21.0		CD	hdr	REPORTING/SUBMITTALS
22.0		CD	Minn. R. 7019.1000, subp. 3	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.
23.0		CD	Minn. R. 7019.1000, subp. 2	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.
24.0		CD	Minn. R. 7019.1000, subp. 1	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.
25.0		CD	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.

COMPLIANCE PLAN CD-01

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

26.0		S/A	Minn. R. 7007.0800, subp. 6(A)(2)	Semiannual Deviations Report: due 30 days after end of each 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.
27.0		CD	Minn. R. 7007.1150 - Minn. R. 7007.1500	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.
28.0		CD	Minn. R. 7007.1400, subp. 1(H)	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).
29.0		S/A	Minn. R. 7007.0800, subp. 6(C)	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.
30.0		CD	Minn. R. 7019.3000 - Minn. R. 7019.3100	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.
31.0		CD	Minn. R. 7002.0005 - Minn. R. 7002.0095	Emission Fees: due 30 days after receipt of an MPCA bill.

COMPLIANCE PLAN CD-01

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

Subject Item: **EU 001 Natural Gas-Fired Turbine - Turbine**

Associated Items: SV 001 Natural Gas-Fired Turbine

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	EMISSION LIMITS
2.0		LIMIT	40 CFR Section 60.4320(a); 40 Section CFR 63, subp. KKKK, Table 2d	Nitrogen Oxides: less than or equal to 25 parts per million at 15 percent O2 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.
3.0		LIMIT	40 CFR Section 60.4330(a)	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 SO2/J (0.060 lb SO2/MMBtu) heat input.
4.0		CD	hdr	OPERATING REQUIREMENTS
5.0		CD	40 CFR Section 60.8(c); Minn. R. 7017.2015, subp. 2(A)	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.
6.0		CD	40 CFR Section 60.4333(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.
7.0		CD	hdr	MONITORING AND RECORDKEEPING REQUIREMENTS
8.0		S/A	40 CFR Section 60.4340(a); 40 CFR Section 60.8	Performance Test: due before 02/11/2016 to measure NOx, in accordance with 40 CFR Section 60.8 and 40 CFR Section 60.4400. 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 (no more than 14 calendar months following the previous performance test).
9.0		S/A	40 CFR Section 60.4375(b)	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
10.0		CD	40 CFR Section 60.4360; 40 CFR Section 60.4370(c)(1)	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 below

COMPLIANCE PLAN CD-01

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

11.0		CD	40 CFR Section 60.4360; 40 CFR Section 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
12.0		CD	40 CFR Section 60.4360; 40 CFR Section 60.4370(c)(1)	(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. (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. (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. cont'd below
13.0		CD	40 CFR Section 60.4360; 40 CFR Section 60.4370(c)(1)	(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: (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. (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. (iii) If any sample result exceeds half the applicable limit, but none exceeds the applicable limit, follow the provisions of paragraph (iii) above. (iv) If the sulfur content of any of the 720 hourly samples exceeds the applicable limit, follow the provisions of paragraph (iv) above.

COMPLIANCE PLAN CD-01

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

Subject Item: **EU 002 Emergency Generator - Reciprocating IC Engine**

Associated Items: SV 002 Emergency Generator

	NC/ CA	Type	Citation	Requirement
1.0		CD	hdr	STATE REQUIREMENTS
2.0		CD	hdr	EMISSION LIMITS
3.0		LIMIT	Minn. R. 7011.2300, subp. 1	Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.
4.0		LIMIT	Minn. R. 7011.2300, subp. 2	Sulfur Dioxide: less than or equal to 0.50 lbs/million Btu heat input . This is less stringent than the limit under 40 CFR Section 60.4207(b) which also applies.
5.0		CD	hdr	OPERATING CONDITIONS
6.0		CD	Minn. R. 7005.0100, subp. 35a	Fuel type: No. 2 fuel oil/diesel fuel
7.0		CD	Minn. R. 7007.0800, subp. 4 & 5	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.
8.0		CD	Minn. R. 7007.0800, subps. 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 0.0015% by weight.
9.0		CD	hdr	NESHAP ZZZZ REQUIREMENTS
10.0		CD	40 CFR 63.6590(c); Minn. R. 7011.8150	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.
11.0		CD	hdr	NSPS IIII REQUIREMENTS
12.0		CD	hdr	EMISSION LIMITS
13.0		LIMIT	40 CFR Section 60.4202(a)(2); 40 CFR 89.113(a); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150	Opacity: less than or equal to 20 percent opacity (exhaust) during the acceleration mode; 15 percent during the lugging mode; and 50 percent during the peaks in either the acceleration or lugging modes.
14.0		LIMIT	40 CFR Section 60.4205(b); 40 CFR 89.112(a); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150	Carbon Monoxide: less than or equal to 3.5 grams/kilowatt-hour
15.0		LIMIT	40 CFR Section 60.4205(b); 40 CFR 89.112(a); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150	NMHC+NOx: less than or equal to 4.0 grams/kilowatt-hour
16.0		LIMIT	40 CFR Section 60.4205(b); 40 CFR 89.112(a); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150	Total Particulate Matter: less than or equal to 0.20 grams/kilowatt-hour
17.0		CD	hdr	OPERATING CONDITIONS
18.0		LIMIT	40 CFR Section 60.4207(b); 40 CFR Section 80.510(b); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150	Sulfur Content of Fuel: less than or equal to 15 parts per million for NR diesel fuel. Cetane index or aromatic content: (i) a minimum cetane index of 40, or (ii) a maximum aromatic content of 35 volume percent. Any existing fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
19.0		CD	40 CFR Section 60.4206; 40 CFR Section 60.4211(a); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150	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.

COMPLIANCE PLAN CD-01

Facility Name: Northern Natural Gas - Albert Lea

Permit Number: 04700065 - 002

20.0		CD	40 CFR Section 60.4211(e); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150	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. 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.
21.0		CD	hdr	MONITORING AND RECORDKEEPING
22.0		CD	40 CFR Section 60.4209(a); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150	Monitoring - Hours of Operation: The engine shall contain a non-resettable hour meter prior to startup of the engine.
23.0		CD	40 CFR Section 60.4211(c); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150	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.
24.0		CD	40 CFR Section 60.4214(b); 40 CFR 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150	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. If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the permittee is not required to submit an initial notification.
25.0		CD	hdr	GENERAL PROVISIONS FOR NSPS IIII
26.0		CD	40 CFR Section 60.4218; 40 CFR Section 63.6590(c); Minn. R. 7011.2305; Minn. R. 7011.8150	The Permittee shall comply with the General Provisions in 40 CFR Section 60.1 through 60.19, as applicable. General Provisions for 60.7(a)(4) and 60.7(b) are specified below.
27.0		CD	40 CFR Section 60.12; Minn. R. 7011.0050	No owner or operator shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard.
28.0		CD	hdr	NOTIFICATIONS (GENERAL PROVISIONS)
29.0		CD	40 CFR Section 60.7(a)(4); Minn. R. 7019.0100, subp. 1	The Permittee shall submit a notification of any physical or operational change which increases emission rate: due 60 days (or as soon as practical) before the change is commenced.
30.0		CD	hdr	RECORDKEEPING (GENERAL PROVISIONS)
31.0		CD	40 CFR Section 60.7(b), Minn. R. 7019.0100, subp. 1	Recordkeeping: Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility including; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
32.0		CD	Minn. R. 7007.0800, subp. 5(C); Minn. R. 7019.0100, subp. 1; 40 CFR Section 60.7(f)	Recordkeeping: Maintain a file of all measurements, maintenance, reports and records for at least five years. 40 CFR Section 60.7(f) specifies two years.

Attachment 3 – MPCA Letter Initiating Permit Reopening
Northern Natural Gas – Albert Lee 04700065-002

Minnesota Pollution Control Agency

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300

800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us | Equal Opportunity Employer

October 24, 2014

Mr. Greg Ammon
Environmental Manager
Northern Natural Gas
1111 South 103rd Street
Omaha, NE 68124

RE: Permit Reopening for Northern Natural Gas – Albert Lee

Dear Mr. Ammon:

On November 16, 2011, Northern Natural Gas sent a letter notifying the MPCA of regulatory inconsistencies in the permit for the emergency generator (EU 002) installed at Northern Natural Gas – Albert Lee. The inconsistencies were present in both the citations and emission limits for the emission unit. The mistakes are prompting a permit reopening process.

The citations for limits on Carbon Monoxide (CO), Total Hydrocarbons (THC), Nitrogen Oxides (NOx), and Total Particulate Matter (PM) referenced the citation 40 CFR § 89.113(a). The citation is for opacity standards, not emission limits. The correct citation for emission limits for the emission unit is 40 CFR § 89.112(a).

The emission limits located in the permit for EU 002 are also incorrect. The limits were taken from *Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder*. The emergency generator at the facility, EU 002, is a 2009 model year engine with a displacement of less than 10 liters per cylinder and a maximum engine power of 619 HP. The emission limits for EU 002 are incorrect and need be changed to the correct limits.

The correct emission limits are found in 40 CFR § 89.112(a), which is referenced in 40 CFR § 60.4205(b). After the permit reopening process is complete, the emission limits for EU 002 will look like the following:

What to do	Why to do it
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	
Carbon Monoxide: Less than or equal to 3.5 grams/kilowatt-hour	40 CFR § 60.4205(b); 40 CFR § 89.112(a); Minn. R. 7011.2305
NMHC+NOx: less than or equal to 4.0 grams/kilowatt-hour	40 CFR § 60.4205(b); 40 CFR § 89.112(a); Minn. R. 7011.2305
Total Particulate Matter: less than or equal to 0.20 grams/kilowatt-hour	40 CFR § 60.4205(b); 40 CFR § 89.112(a); Minn. R. 7011.2305

The MPCA plans to reopen the permit in accordance with Minn. R. 7007.1600, subp. 1(c). The rule states:

> *The agency shall reopen and amend a permit when the agency or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards, limitations, or other terms or conditions of the permit.*

The inconsistences, described above, are material mistakes. The process for reopening and amending a permit is similar to the procedures that apply to major permit amendments under Minn. R. 7007.0100-1850. During the reopening, the MPCA may only make changes to the permit that are related to the basis for the reopening under Minn. R. 7007.1600, subp. 1 and 2. The major permit amendment process will begin when the MPCA gives the permittee written notice of its intent to amend the permit. This letter is the method for the written notice. The MPCA in unable to issue the amendment, or make public notice of the amendment, until at least 30 days after the MPCA has given Northern Natural Gas – Albert Lee notice of the intent to reopen the permit. The permittee is able to consent to a shorter period between this letter and when the permit can be placed on public notice. There will be a public notice period with this reopening. Only the proposed changes, in this case the emission limits and citations, will be open for public comment. The administrative amendment submitted on November 12, 2010 will be rolled into the draft permit for this reopening.

If you have any questions regarding this letter or the permit reopening process, please feel free to contact me at 651-757-2663.

Sincerely,

Zachary Tauer
Engineer
Air Quality Permits Section
Industrial Division

ZT:lao

cc: Cory Boeck, MPCA, Mankato
AQ File No. 624J