



AIR EMISSION PERMIT NO. 03700064-004
Major Amendment

IS ISSUED TO

Northern States Power Co dba Xcel Energy

XCEL ENERGY - WESCOTT LNG PLANT

10326 Robert Trail South
Inver Grove Heights, Dakota County, Minnesota 55075

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. 03700064-003, and 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: Federal; Pt 70/Major for NSR

Operating Permit Issue Date: March 9, 2009

Major Amendment Issue Date: August 31, 2011

Expiration Date: March 9, 2014

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

for Paul Aasen
Commissioner
Minnesota Pollution Control Agency

Permit Applications Table

Permit Type	Application Date	Permit Action
Total Facility Operating Permit	10-23-00	001
Administrative Amendment	6-28-01	002
Total Facility Operating Permit Reissuance	4-26-05	003
Major Amendment	12-16-10	004

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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:

Xcel Energy's Wescott Plant (Facility) is a liquefied natural gas and propane peak-shaving plant. The Facility collects and stores propane and natural gas for future supply to the local propane and natural gas distribution systems during cold winter periods when regional natural gas and propane supplies may not meet the increased demand. Because each emission unit is fueled by natural gas, the major pollutants are Nitrogen Oxides (NO_x) and Carbon Monoxide (CO). The facility consists of the following emission units:

- One natural gas powered compressor that compresses the inlet natural gas to be liquified. The compressor also circulates refrigerant; the refrigerant liquefies the natural gas for storage in the storage tanks. This emission unit is the main source of NO_x and CO emissions for the Facility. (EU 002).
- Four water/glycol heaters used to heat natural gas from a liquid to a vapor for injection into the gas distribution system. (EU 003 – EU 006).
- One regeneration heater, which heats filtered natural gas to regenerate the filter material; the filter material is used to clean the gas before liquefaction (EU 007).

The facility also has four main storage tanks. Two of these tanks store liquid natural gas. The remaining two tanks store propane. Due to the type of liquid stored, the storage tanks are insignificant activities not required to be listed in the permit. Each storage tank has a vapor recovery system that either routes the vapors through a liquefaction process and back to the tank, or directly out to the distribution system.

The facility also has various valves, electric pumps, and other fittings that may emit fugitive volatile organic chemicals. The facility has a system to alert workers of the presence of a natural gas leak. The system consists of a series of monitors placed throughout the facility that, when triggered, sound an audible alarm to warn workers of the danger. While the system is designed to ensure the safety of the workers, it also ensures that fugitive leaks are kept to a minimum.

AMENDMENT DESCRIPTION:

This permit amendment is to accommodate replacement of the natural gas fired compressor (a two-stroke reciprocating internal combustion engine) with a new natural gas fired mechanical drive combustion turbine. The new turbine utilizes dry low-NO_x combustion technology, and the total facility potential emissions of NO_x, CO, VOC, and HAPs will decrease as a result of this modification. The facility will retain its status as a major source relative to Part 70 and will become a minor source under New Source Review. Upon implementation of the replacement, the permit requirements associated with the heading "Determining if a Project/Modification is Subject to New Source Review" will no longer apply.

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-1 09/01/11

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 004

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

Subject Item: Total Facility

What to do	Why to do it
DETERMINING IF A PROJECT/MODIFICATION IS SUBJECT TO NEW SOURCE REVIEW (NSR)	hdr
<p>These requirements apply if a reasonable possibility (RP) as defined in 40 CFR Section 52.21(r)(6)(vi) exists that a proposed project, analyzed using the actual-to-projected-actual (ATPA) test (either by itself or as part of the hybrid test at Section 52.21(a)(2)(iv)(f)) and found to not be part of a major modification, may result in a significant emissions increase (SEI). If the ATPA test is not used for the project, or if there is no RP that the proposed project could result in a SEI, these requirements do not apply to that project. The Permittee is only subject to the Preconstruction Documentation requirement for a project where a RP occurs only within the meaning of Section 52.2(r)(6)(vi)(a).</p> <p>Even though a particular modification is not subject to NSR, or where there isn't a RP that a proposed project could result in a SEI, a permit amendment, recordkeeping, or notification may still be required by Minn. R. 7007.1150 - 7007.1500.</p>	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subp. 2
<p>Preconstruction Documentation -- Before beginning actual construction on a project, the Permittee shall document the following:</p> <ol style="list-style-type: none"> 1. Project description 2. Identification of any emission unit (EU) whose emissions of an NSR pollutant could be affected 3. Pre-change potential emissions of any affected existing EU, and the projected post-change potential emissions of any affected existing or new EU. 4. A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded due to increases not associated with the modification and that the EU could have accommodated during the baseline period, an explanation of why the amounts were excluded, and any creditable contemporaneous increases and decreases that were considered in the determination. <p>The Permittee shall maintain records of this documentation.</p>	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.1200, subp. 4; Minn. R. 7007.0800, subps. 4 & 5
<p>The Permittee shall monitor the actual emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using the ATPA test, and the potential emissions of any regulated NSR pollutant that could increase as a result of the project and that were analyzed using potential emissions in the hybrid test. The Permittee shall calculate and maintain a record of the sum of the actual and potential (if the hybrid test was used in the analysis) emissions of the regulated pollutant, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity of or potential to emit of any unit associated with the project.</p>	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 & 5
<p>The Permittee must submit a report to the Agency if the annual summed (actual, plus potential if used in hybrid test) emissions differ from the preconstruction projection and exceed the baseline actual emissions by a significant amount as listed at 40 CFR Section 52.21(b)(23). Such report shall be submitted to the Agency within 60 days after the end of the year in which the exceedances occur. The report shall contain:</p> <ol style="list-style-type: none"> a. The name and ID number of the facility, and the name and telephone number of the facility contact person b. The annual emissions (actual, plus potential if any part of the project was analyzed using the hybrid test) for each pollutant for which the preconstruction projection and significant emissions increase are exceeded. c. Any other information, such as an explanation as to why the summed emissions differ from the preconstruction projection. 	Title I Condition: 40 CFR Section 52.21(r)(6); Minn. R. 7007.3000; Minn. R. 7007.0800, subps. 4 & 5
OPERATIONAL REQUIREMENTS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-2** 09/01/11

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 004

The Permittee shall comply with National Primary and Secondary Ambient Air Quality Standards, 40 CFR pt. 50, and the Minnesota Ambient Air Quality Standards, Minn. R. 7009.0010 to 7009.0080. Compliance shall be demonstrated upon written request by the MPCA.	40 CFR pt. 50; Minn. Stat. Section 116.07, subds. 4a & 9; Minn. R. 7007.0100, subps. 7A, 7L & 7M; Minn. R. 7007.0800, subps. 1, 2 & 4; Minn. R. 7009.0010-7009.0080
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, unless otherwise noted in Table A.	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 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 - Microfiche 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, 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 (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-3**

09/01/11

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 004

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)
When 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 expiring permits, these records shall be kept for a period of five years from the date the change was made or until permit reissuance, whichever is longer. 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 and B 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 and B 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 through Minn. R. 7007.1500. Submittal dates vary, depending on the type of amendment needed.	Minn. R. 7007.1150 through Minn. R. 7007.1500

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

09/01/11

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 004

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. The Permittee shall submit this on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3100
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-5** 09/01/11

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 004

Subject Item: GP 001 Water/Glycol Heaters**Associated Items:** EU 003 Water/Glycol heater

EU 004 Water/Glycol heater

EU 005 Water/Glycol heater

What to do	Why to do it
EMISSION LIMITS	hdr
Nitrogen Oxides: less than or equal to 0.140 lbs/million Btu heat input . This limit applies individually to each emission unit.	Title I Condition: Limit to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000
OPERATIONAL LIMITS	hdr
Operating Hours: less than or equal to 7950 hours/year using 12-month Rolling Sum . This limit applies to the group.	Title I Condition: Limit to avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000
RECORDKEEPING	hdr
Daily Recordkeeping. On each day of operation, the Permittee shall record and maintain the total operating hours for each unit in GP 001. This shall be based on written usage logs and hours of operation meters.	Title I Condition: To avoid classification as a major modification under 40 CFR 52.21 and Minn. R. 7007.3000
Monthly Recordkeeping -- Hours of Operation. By the 15th day of each month, the Permittee shall calculate and record the following: 1) The sum of the hours of operation for all units in GP 001 for the previous month and; 2) The 12-month rolling sum combined hours of operation for the previous 12-month period for GP 001 by summing the monthly hours of operation data for the previous 12 months.	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21 and Minn. R. 7007.3000

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

09/01/11

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 004

Subject Item: GP 002 Water/Glycol Heaters - NSPS**Associated Items:** EU 003 Water/Glycol heater

EU 004 Water/Glycol heater

EU 005 Water/Glycol heater

EU 006 Water/Glycol heater

What to do	Why to do it
OPERATING CONDITIONS	hdr
Fuel Type: Natural Gas only by design	Minn. R. 7005.0100, subp. 35a
RECORDKEEPING	hdr
Recordkeeping: By the last day of each calendar month, the Permittee shall record the amount of natural gas combusted in the heaters during the previous calendar month. These records shall consist of fuel meter readings. This requirement applies individually to each emission unit.	40 CFR Section 60.48c(g); Minn. R. 7011.0570; Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS**A-7** 09/01/11

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 004

Subject Item: EU 007 Regeneration Heater**Associated Items:** SV 007 Regeneration Heater

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.40 lbs/million Btu heat input . (The potential to emit from the unit is 0.076 lb/MMBtu due to equipment design and allowable fuels.)	Minn. R. 7011.0515, subp. 1
Opacity: less than or equal to 20 percent opacity except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0515, subp. 2
OPERATING CONDITIONS	hdr
Fuel usage: Natural gas only by design.	Minn. R. 7005.0100, subp. 35a

TABLE A: LIMITS AND OTHER REQUIREMENTS

A-8 09/01/11

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 004

Subject Item: EU 008 Combustion Turbine**Associated Items:** CE 001 Low NOx Burners

SV 008 Combustion Turbine

What to do	Why to do it
Fuel Usage: Natural gas by design	Minn. R. 7005.0100, subp. 35a
NSPS GENERAL PROVISIONS	hdr
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: 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. 7997.0800, subp. 5(C); meets requirements of 40 CFR Section 60.7(f); Minn. R. 7019.0100, subp. 1
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
EMISSION LIMITS	hdr
Nitrogen Oxides: less than or equal to 25.00 parts per million at 15 percent oxygen (O ₂) or 150 ng/J of useful output (1.2 lb/MWh)	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	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 008, 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 365 days after end of each calendar year following Initial Startup to measure NOx emissions. If the NOx emission result from the performance test is less than 75 percent of the NOx emission limit for EU 008, subsequent performance test frequency may be reduced to once every 2 years (no more than 26 calendar months following previous performance test). If results of any subsequent performance test exceed 75 percent of the NOx emission limit for EU 008, annual testing must resume. NOx performance testing for EU 008 must be conducted according to the procedures described in 40 CFR Section 60.4400.	40 CFR Section 60.4340(b)
NOx Performance Test Report: In addition to the other notifications and submittals required by Minn. R. ch. 7017, the Permittee shall submit a written report of the results of each NOx performance test before the close of business on the 60th day following completion of the performance test.	40 CFR Section 60.4375(b)
Fuel Sulfur Content: The Permittee shall maintain a current valid purchase contract, tariff sheet, or transportation contract for the fuel, specifying the maximum total sulfur content for natural gas is 20 grains of sulfur or less per 100 standard cubic feet, and that the fuel has potential sulfur emissions of less than 26 ng SO ₂ /J (0.060 lb SO ₂ /MMBtu) heat input. Alternatively, the Permittee may elect to maintain representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO ₂ /J (0.060 lb SO ₂ /MMBtu) heat input.	40 CFR Section 60.4365

TABLE B: SUBMITTALS

B-1 09/01/11

Facility Name: Xcel Energy - Wescott LNG Plant
Permit Number: 03700064 - 004

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.

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.

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.

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

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** 09/01/11

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 004

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit (due by September 10, 2013).	Total Facility
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup	EU008
Notification of the Date Construction Began	due 30 days after Start Of Construction. Submit the name and number of each unit and the date construction of each unit began.	EU008

TABLE B: RECURRENT SUBMITTALS**B-3** 09/01/11

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 004

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 03/09/2009 . 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 starting 03/09/2009 (for the previous calendar year). The Permittee shall submit this on a form approved by the Commissioner, both to the Commissioner and to the US EPA regional office in Chicago. This report covers all deviations experienced during the calendar year.	Total Facility

APPENDIX MATERIAL

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064-004

APPENDIX I

INSIGNIFICANT ACTIVITIES

Insignificant Activity	General Applicable Emission limit	Discussion
IA 001: Microturbine C30, IA 002: Microturbine C60	SO ₂ ≤ 0.50 lb/MMBtu Opacity ≤ 20% (Minn. R. 7011.2300)	For these units, based on the fuel used and EPA published emissions factors, it is highly unlikely that they could violate the applicable requirements. Design based PTE for each unit, using AP-42, is calculated in the Attachment 1.
IA 003: LP Heater H1, IA 004: LP Heater H2, IA 005: LP Heater H3, IA 006: LNG Control Building Heater 1, IA 007: LNG Control Building Heater 2, IA 008: Portaheater, IA 009: LP Building Heater	Opacity: ≤ 20 % with exceptions (Minn. R. 7011.0610)	Standards of Performance for Direct Heating Equipment. Because these units burn natural gas and are inside the Minneapolis – St. Paul Air Quality Control Region, there is not a SO _x limit. Because these units are not process equipment, there is not a particulate matter limit. Because these units burn natural gas only, they are unlikely to exceed the opacity limit. Design based PTE for each unit, using AP-42, is calculated in the Attachment 1.
IA 010: 25 kW Emergency Generator	SO ₂ ≤ 0.50 lb/MMBtu Opacity ≤ 20% (40 CFR § 63, subp. ZZZZ and Minn. R. 7011.2300)	Because this unit burns natural gas, it is unlikely that this unit could violate the applicable requirements. Design based PTE for this unit, using AP-42, is calculated in Attachment 1. Because this generator was built before June 12, 2006, it is an existing affected stationary emergency RICE as defined at 40 CFR Section 63.6590(a)(1)(iii). However, this unit meets the criteria in 40 CFR § 63.6590(b)(3). Therefore no further limits, recordkeeping, or notifications apply under NESHAP ZZZZ.

Insignificant Activity	General Applicable Emission limit	Discussion
IA 011: Flare	Opacity: $\leq 20\%$ with exceptions (Minn. R. 7011.0610)	For this unit, based on the fuels used and EPA published emissions factors, it is highly unlikely that it could violate the applicable requirements. Design based PTE for this unit, using AP-42, is calculated in the Attachment 1.
Brazing, soldering or welding equipment	PM, variable depending on airflow Opacity $\leq 20\%$ (Minn. R. 7011.0710/715)	For these units, based on EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, these units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Fugitive Emissions from unpaved roads and parking lots	Requirement to take reasonable measures to prevent PM from becoming airborne (Minn. R. 7011.0150)	The Facility is located in the Metro area and has all paved parking lots and few private roads. Nearly all surfaces are currently paved. The permit does contain a general requirement that this standard must be met.
Infrequent use of spray paint equipment for routine housekeeping or plant upkeep activities not associated with primary production processes at the stationary source	PM, variable depending on airflow or process weight rate Opacity $\leq 20\%$ (Minn. R. 7011.0715)	While spray equipment will have the potential to emit particulate matter, these particular activities are those not associated with production, so they would be infrequent and usually occur outdoors. Testing or monitoring is not feasible.

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 03700064-004

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: 4925)
Northern States Power Company 414 Nicollet Mall Minneapolis, MN 55401	Xcel Energy – Wescott LNG Plant 10326 South Robert Trail Inver Grove Heights, MN 55075 Dakota County
Contact: Jonathan Amos, Environmental Analyst Phone: 612-330-7682	

1.2 Facility Description

Northern States Power Company's (Permittee) Xcel Energy - Wescott LNG Plant (Facility) is a liquefied natural gas and propane peak-shaving plant. The Facility collects and stores propane and natural gas for future supply to the local propane and natural gas distribution systems during cold winter periods when regional natural gas and propane supplies may not meet the increased demand. Because each emission unit is fueled by natural gas, the major pollutants are oxides of nitrogen (NO_x) and carbon monoxide (CO). The Facility currently consists of the following emission units:

- One regeneration heater (EU 007), which heats filtered natural gas to regenerate the filter material; the filter material is used to clean the gas before liquefaction.
- One natural gas powered two-stroke reciprocating internal combustion compressor engine (EU 002) that compresses the inlet natural gas to be liquified. The compressor also circulates refrigerant; the refrigerant liquefies the natural gas for storage in the storage tanks. This emission unit is the main source of NO_x and CO emissions for the Facility.

- Four water/glycol heaters (EU 003 – EU 006) used to heat natural gas from a liquid to a vapor for injection into the gas distribution system.

The Facility also has four main storage tanks. Two of these tanks store liquid natural gas. The remaining two tanks store propane. Due to the type of liquid stored, the storage tanks are insignificant activities not required to be listed in the permit. Each storage tank has a vapor recovery system that either routes the vapors through a liquefaction process and back to the tank, or directly out to the distribution system.

The Facility also has various valves, electric pumps, and other fittings that may emit fugitive volatile organic chemicals. The Facility has a system to alert workers of the presence of a natural gas leak. The system consists of a series of monitors placed throughout the Facility that, when triggered, sound an audible alarm to warn workers of the danger. While the system is designed to ensure the safety of the workers, it also ensures that fugitive leaks are kept to a minimum.

1.3 Description of the Activities Allowed by this Permit Action

As previously stated, the current Facility configuration includes a natural gas powered two-stroke reciprocating internal combustion compressor engine. The Permittee has proposed replacing this emission unit (EU 002) with a new natural gas fired mechanical drive combustion turbine (EU 008). The new turbine will be equipped with dry low-NO_x combustion technology, and the resultant potential emissions change from this project will be net decreases in NO_x, CO, VOC, and HAPs from the Facility.

This permit amendment also removes performance testing requirements for the water/glycol heater emission unit group (GP 001). This group of emission units (EU 003 – EU 005) has an annual operating hour limit (7,950 hours per year based on 12-month rolling sum), along with associated recordkeeping, as a mechanism of assuring that the previous installation of these units did not constitute a major PSD modification.

1.4. Facility Emissions:

Table 2. Title I Emissions Increase Summary

Pollutant	Emissions Increase from the Modification (tpy)	Limited Emissions Increase from the Modification (tpy)	Source-wide Contemporaneous Increases and Decreases* (tpy)	Net Emissions Increase (tpy)	NSR Significance Thresholds for major sources (tpy)	NSR Review Required? (Yes/No)
PM	9.04	9.04	-0.90	8.14	25	No
PM ₁₀	9.04	9.04	-0.90	8.14	15	No
PM _{2.5}	9.04	9.04	-0.90	8.14	10	No
NO _x	23.91	23.91	-256.17	-232.26	40	No
SO ₂	1.18	1.18	-0.06	1.12	40	No
CO	9.72	9.72	-35.99	-26.27	100	No
Ozone (VOC)	0.73	0.73	-10.47	-9.74	40	No
Lead	0.00	0.00	0.00	0.00	0.6	No
CO ₂ -e**	40,600	40,600	-10,532	30,068	75,000	No

* Other emission changes during the contemporaneous period as defined by 40 CFR § 52.21, 40 CFR

§ 52.24 or 40 CFR pt. 51.

**Carbon dioxide equivalents as defined in Minn. R. 7007.0100.

Table 3. Total Facility Potential to Emit Summary

	PM tpy	PM₁₀ tpy	PM_{2.5} tpy	SO₂ tpy	NO_x tpy	CO tpy	CO₂-e Tpy	VOC tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions	15.41	10.84	10.84	1.83	142.51	86.93	166,241	6.65	0.25	0.47
Total Facility Actual Emissions (2008)	0.23	0.23	*	0.01	31.13	4.50	*	1.40	*	

* Not reported in 2008 Minnesota emission inventory.

Table 4. Facility Classification

Classification	Major/Affected Source	Synthetic Minor/Area	Minor/Area
PSD			PM, PM ₁₀ , PM _{2.5} , SO ₂ , CO, VOC, NO _x
Part 70 Permit Program	NO _x		PM, PM ₁₀ , PM _{2.5} , SO ₂ , CO, VOC
Part 63 NESHAP			HAPs

2. Regulatory and/or Statutory Basis

New Source Review

The Facility is an existing major source for NO_x under New Source Review (NSR) regulations. Because the new natural gas fired mechanical drive combustion turbine (EU 008) will have substantially lower potential emissions than the unit it will replace, the Facility will become a true minor source relative to NSR upon issuance of this permit amendment. The facility will be a true minor source because potential emissions of all criteria pollutants will be below the applicable 250 tpy major source threshold upon permit issuance. Because of this, the fact that CO₂-e potential emissions will be greater than 100,000 tpy has no bearing on the determination of NSR source status (i.e. major or minor).

Part 70 Permit Program

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

New Source Performance Standards (NSPS)

The four water/glycol heaters, EU 003 through EU 006, are subject to Standards of Performance for Small and Industrial Commercial and Institutional Steam Generating Units (40 CFR pt. 60, subp. Dc). The new natural gas fired mechanical drive combustion turbine (EU 008) will be subject to Standards of Performance for Stationary Combustion Turbines (40 CFR pt. 60, subp. KKKK).

National Emission Standards for Hazardous Air Pollutants (NESHAP)

The Facility is a non-major source of hazardous air pollutants (HAP) under 40 CFR pt. 63.

Minnesota State Rules

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

- Minn. R. 7011.0150 – Preventing Fugitive Matter from Becoming Airborne
- Minn. R. 7011.0510 - Standards of Performance for Existing Indirect Heating Equipment
- Minn. R. 7011.0610 – Standards of Performance for Fossil-Fuel-Burning Direct Heating Equipment

- Minn. R. 7011.0710 – Standards of Performance for Pre-1969 Industrial Process Equipment
- Minn. R. 7011.0715 – Standards of Performance for Post-1969 Industrial Process Equipment

Table 5. Regulatory Overview of Units Affected by the Modification/Permit Amendment

Level*	Applicable Regulations	Comments:
EU 002	Minn. R. 7007.2300	Standards of Performance for Internal Combustion Engines: $\text{SO}_2 \leq 0.50 \text{ lbs/MMBtu}$ Opacity: ≤ 20 percent once operating temp. is attained This emission unit is being removed as part of this permit action and will no longer be in operation
GP 001	Title I Condition: To avoid classification as a major modification under 40 CFR § 52.21 and Minn. R. 7007.3000	Performance testing for this group of emission units is being discontinued because the units have an annual limit on hours of operation and associated recordkeeping requirements as the compliance demonstration mechanism
EU 008	40 CFR pt. 60, subp. KKKK	The new natural gas fired mechanical drive combustion turbine will be subject to Standards of Performance for Stationary Combustion Turbines

*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

3. Technical Information

3.0.1 Group 001 (EU 003, EU 004, EU 005)

Three water/glycol units (GP 001) and three small heaters (IA 004, IA 005, IA 006) were constructed during the same year. Due to the close nature of the construction times, the limited PTE for all six units are summed and then evaluated against the PSD major modification threshold. Analysis of AP-42 data indicates that NO_x is the major pollutant for these units. The PSD major modification significance threshold for NO_x is 40 tons

per year at PSD major sources. To avoid exceeding the major modification threshold, the Facility has chosen to take a limit on the hours of operation for GP 001. The hours of operation for GP 001 may not exceed 7,950 hours as determined by a 12-month rolling sum. To calculate the group's worst-case emissions, the operating limit is applied against the unit with the most emissions. In this case, each of the three units comprising GP 001 is functionally identical. The Facility has chosen to use an emission factor of 0.14 lb-NO_x / MMBtu; this emission factor is higher than the manufacturer's suggested emission factor of 0.12 lb-NO_x / MMBtu. The limited PTE of NO_x emissions for six units is detailed below:

GP 001

Limit: 7950 hours per year, 12-month rolling sum

NO_x Emission Factor: 0.140 lb/MMBtu

$$(7,950 \text{ h/yr}) * (62.8 \text{ MMBtu/h}) * (0.140 \text{ lb-NO}_x/\text{MMBtu}) * (1 \text{ ton}/2,000\text{lb}) = 35 \text{ tons NO}_x / \text{yr}$$

IA 003, IA 004, IA 005

AP-42 Emission Factor for Low-NO_x Small Boilers, <100 MMBtu/hr: 50 lb-NO_x/million ft³

$$3 * (8,760 \text{ h/yr}) * (4.5 \text{ MMBtu/h}) * (50 \text{ lb-NO}_x/\text{million ft}^3) * (1 \text{ ft}^3/1,020 \text{ Btu}) * (1 \text{ ton}/2,000\text{lb}) = 2.9 \text{ tons NO}_x / \text{yr}$$

Total PTE for the six units

$$35 \text{ tpy NO}_x + 2.9 \text{ tpy NO}_x = 37.9 \text{ tpy NO}_x$$

Because the Facility is relying on both the NO_x emission factor and the hours of operation limit to avoid major modification status under PSD, the chosen emission factor of 0.14 lb-NO_x / MMBtu was subject to a performance test. The results of this test indicated a NO_x emission factor of 0.135 lb/MMBtu, below the assumed emission factor of 0.140 lb/MMBtu.

The Facility will become a true minor PSD source upon issuance of this permit amendment. Additionally, the Facility has indicated that the units in this group operate seasonally and it is difficult to run them at sufficient load for performance testing. The other significant NO_x emission source (the new natural gas fired mechanical drive combustion turbine – EU 008) will be performance tested due to the fact that it will be subject to an NSPS (40 CFR pt. 60, subp. KKKK). For these reasons, along with the recordkeeping requirements for the hours of operation limit, MPCA staff have concluded

that it is appropriate to not require additional performance testing of the water/glycol units (GP 001).

3.0.2 Emission Unit EU 008

The new natural gas fired mechanical drive combustion turbine will be equipped with dry low-NO_x combustion technology, and the resultant potential emissions change from this project will be net decreases in NO_x, CO, VOC, and HAPs from the Facility. The emission calculations for EU 008, as well as all other emission units at the Facility are contained in Attachment 1 to this TSD. Emission factors for criteria pollutants were obtained from manufacturer's data. Emission factors for HAPs were sourced from AP-42 Table 3.1-3 (4/00). Greenhouse gas emissions were calculated using emission factors from 40 CFR pt. 98, subpt. C, Table C-2. As previously stated, the Facility will become a true minor source under PSD regulations upon issuance of this permit amendment even though potential CO₂-e emissions exceed 100,000 tpy; this is because all criteria pollutant potential emissions will be below the applicable 250 tpy PSD major source threshold.

Potential emissions increases from addition of EU 008 were compared to baseline actual emissions from EU 002 for the 2003-2004 reporting years in MPCA's emission inventory database. Greenhouse gas emissions were not previously reported, so potential emissions were calculated based on reported fuel use at the Facility.

The permit application form EC-03 for Internal Combustion Engine (Single Fuel) emission units directs applicants to analyze stack parameters and potential emissions using the SCREEN3 modeling tool for ambient air impacts. This analysis was performed and the results indicate that predicted ambient air impacts are well below concentration-based target levels for all pollutants at their respective averaging times.

The new combustion turbine will be subject to a New Source Performance Standard: Standards of Performance for Stationary Combustion Turbines (40 CFR pt. 60, subp. KKKK). Because the facility is not a major source of HAPs, the Stationary Combustion Turbine NESHAP (40 CFR pt. 63, subp. YYYY) does not apply.

3.1 Calculations of Potential to Emit

The emission calculations for EU 008, as well as all other emission units at the Facility are contained in Attachment 1 to this TSD.

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

Table 6. Periodic Monitoring

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
Heaters: GP 001	Operating Hours: 7,950 hr/yr (Title I Condition to avoid classification as a major modification under 40 CFR § 52.21; Minn. R. 7007.3000)	Recordkeeping: Operational records Performance Testing	The three units in this group have a common pool of 7,950 hours to be used annually. To account for these hours, the following recordkeeping will be used: On each day of operation, the hours of operation are to be logged for each unit. By the 15 th of each month, the Permittee will calculate and record the following: <ol style="list-style-type: none">1) The sum of the hours of operation for all units in GP 001 for the previous month and;2) The 12-month rolling sum combined hours of operation for GP 001.

Emission Unit or Group	Requirement (basis)	Additional Monitoring	Discussion
Heaters: GP 002	Recordkeeping : Fuel Records (40 CFR § 60.48c(g)(2); Minn. R. 7011.0570)		Fuel Type: Restricted to Natural Gas
Combustion Turbine: EU 008	SO ₂ ≤ 110 ng/j heat input Nitrogen Oxides ≤ 25.00 ppm (40 CFR 63, subp. KKKK; Minn. R. 7007.2300)	Fuel Type: Restricted to Natural Gas	The unit uses natural gas; therefore, the likelihood of violating either of the emission limits is small. All monitoring, recordkeeping, and reporting requirements for this emission unit are based on the applicable New Source Performance Standard
Indirect Heating Equipment: EU 007	PM: ≤ 0.40 lb/MMBtu Opacity: ≤ 20 % with exceptions (Minn. R. 7011.0515)	Fuel Type: Restricted to Natural Gas	The unit uses natural gas; therefore, the likelihood of violating either of the emission limits is very small. The Permittee can demonstrate that this unit will continue to operate such that emissions are well below the emission limits by only burning natural gas. Since this is a permit condition, the semi-annual deviations report will document any deviations from this condition. Design based PTE for the unit, using AP-42, is 0.0076 compared to the rule limit of 0.4 lb/MMBtu.

*Where the requirement appears in the permit (e.g., EU, SV, GP, etc.).

3.3 Insignificant Activities

The Facility has several operations which are classified as insignificant activities. These are listed in Attachment 2 to the permit.

The permit is required to include periodic monitoring for all emissions units, including insignificant activities, per EPA guidance. The insignificant activities at this Facility are only subject to general applicable requirements. Using the criteria outlined earlier in this TSD, the following table documents the justification why no additional periodic monitoring is necessary

for the current insignificant activities. See Attachment 1 of this TSD for PTE information for the insignificant activities.

Table 5. Insignificant Activities

Insignificant Activity	General Applicable Emission limit	Discussion
IA 001: Microturbine C30, IA 002: Microturbine C60	$\text{SO}_2 \leq 0.50$ lb/MMBtu $\text{Opacity} \leq 20\%$ (Minn. R. 7011.2300)	For these units, based on the fuel used and EPA published emissions factors, it is highly unlikely that they could violate the applicable requirements. Design based PTE for each unit, using AP-42, is calculated in the Attachment 1.
IA 003: LP Heater H1, IA 004: LP Heater H2, IA 005: LP Heater H3, IA 006: LNG Control Building Heater 1, IA 007: LNG Control Building Heater 2, IA 008: Portaheater, IA 009: LP Building Heater	$\text{Opacity} \leq 20\%$ with exceptions (Minn. R. 7011.0610)	Standards of Performance for Direct Heating Equipment. Because these units burn natural gas and are inside the Minneapolis – St. Paul Air Quality Control Region, there is not a SO_x limit. Because these units are not process equipment, there is not a particulate matter limit. Because these units burn natural gas only, they are unlikely to exceed the opacity limit. Design based PTE for each unit, using AP-42, is calculated in the Attachment 1.
IA 010: 25 kW Emergency Generator	$\text{SO}_2 \leq 0.50$ lb/MMBtu $\text{Opacity} \leq 20\%$ (40 CFR § 63, subp. ZZZZ and Minn. R. 7011.2300)	Because this unit burns natural gas, it is unlikely that this unit could violate the applicable requirements. Design based PTE for this unit, using AP-42, is calculated in Attachment 1. Because this generator was built before June 12, 2006, it is an existing affected stationary emergency RICE as defined at 40 CFR Section 63.6590(a)(1)(iii). However, this unit meets the criteria in 40 CFR § 63.6590(b)(3). Therefore no further limits, recordkeeping, or notifications apply under NESHAP ZZZZ.

Insignificant Activity	General Applicable Emission limit	Discussion
IA 011: Flare	Opacity: ≤ 20 % with exceptions (Minn. R. 7011.0610)	For this unit, based on the fuels used and EPA published emissions factors, it is highly unlikely that it could violate the applicable requirements. Design based PTE for this unit, using AP-42, is calculated in the Attachment 1.
Brazing, soldering or welding equipment	PM, variable depending on airflow Opacity $\leq 20\%$ (Minn. R. 7011.0710/715)	For these units, based on EPA published emissions factors, it is highly unlikely that they could violate the applicable requirement. In addition, these units are typically operated and vented inside a building, so testing for PM or opacity is not feasible.
Fugitive Emissions from unpaved roads and parking lots	Requirement to take reasonable measures to prevent PM from becoming airborne (Minn. R. 7011.0150)	The Facility is located in the Metro area and has all paved parking lots and few private roads. Nearly all surfaces are currently paved. The permit does contain a general requirement that this standard must be met.
Infrequent use of spray paint equipment for routine housekeeping or plant upkeep activities not associated with primary production processes at the stationary source	PM, variable depending on airflow or process weight rate Opacity $\leq 20\%$ (Minn. R. 7011.0715)	While spray equipment will have the potential to emit particulate matter, these particular activities are those not associated with production, so they would be infrequent and usually occur outdoors. Testing or monitoring is not feasible.

3.4 Permit Organization

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

3.5 Comments Received

Public Notice Period: June 27, 2011 – July 26, 2011

EPA 45-day Review Period: June 27, 2011 – August 10, 2011

No comments were received during the public notice period or the EPA review period.

4. Permit Fee Assessment

The fee calculation worksheet for this permit action is included in this TSD as Attachment 2.

5. Conclusion

Based on the information provided by Xcel Energy, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 03700064-004 and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Jim Robin (permit writer/engineer)
Brent Rohne (enforcement)
Marc Severin (stack testing)
Dave Beil (peer reviewer)

AQ File No. 202T; DQ 3344

Attachments: 1. Emission Calculations
 2. Fee Calculations

ATTACHMENT 1
EMISSION CALCULATIONS



Emission
Calculations.pdf

ATTACHMENT 2
FEE CALCULATIONS



Fee Calcs.pdf