

**AIR EMISSION PERMIT NO. 03700064-003**  
**Total Facility Oper. Permit - Reissuance**

**IS ISSUED TO**

Northern States Power Co dba Xcel Energy

**XCEL ENERGY - WESCOTT LNG PLANT**  
10326 South Robert Trail  
Inver Grove Heights, Dakota County, MN 55075

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

This permit reissuance supersedes Air Emission Permit No. 03700064-002 and authorizes the Permittee to operate the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn.

R. 7007.1150 to 7007.1500. Terms used in the permit are 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 State Implementation Plan under 40 CFR § 52.1220 and as such as are enforceable by U.S. Environmental Protection Agency Administrator or citizens under the Clean Air Act.

**Permit Type:** Federal; Pt 70/Major for NSR

**Operating Permit Issue Date:** March 9, 2009

**Expiration Date:** March 9, 2014

All Title I Conditions do not expire.

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

for Paul Eger  
Commissioner  
Minnesota Pollution Control Agency

**Permit Applications Table**

<b>Permit Type</b>	<b>Application Date</b>	<b>Permit Action</b>
Total Facility Operating Permit Reissuance	10-23-00	001
Administrative Amendment	6-28-01	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:**

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<sub>x</sub>) and Carbon Dioxide (CO). The facility consists of the following emission units:

- One natural gas powered compressor that liquefies inlet natural gas. The compressor also liquefies refrigerant; the refrigerant ensures the natural gas stays cool within the storage tanks. This emission unit is the main source of NO<sub>x</sub> 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.

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

03/09/09

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 003

**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**

<b>What to do</b>	<b>Why to do it</b>
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"> <li>1. Project description</li> <li>2. Identification of any emission unit (EU) whose emissions of an NSR pollutant could be affected</li> <li>3. Pre-change potential emissions of any affected existing EU, and the projected post-change potential emissions of any affected existing or new EU.</li> <li>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.</li> </ol> <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
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.	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"> <li>a. The name and ID number of the facility, and the name and telephone number of the facility contact person</li> <li>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.</li> <li>c. Any other information, such as an explanation as to why the summed emissions differ from the preconstruction projection.</li> </ol>	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**

03/09/09

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 003

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**

03/09/09

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 003

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**

03/09/09

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 003

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**

03/09/09

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 003

**Subject Item: GP 001 Water/Glycol Heaters - Section 52.21 Limits, Performance Testing Information****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
PERFORMANCE TESTING	hdr
Performance Test: due 300 days after Permit Issuance to measure NOx emissions. This performance test shall be conducted on a representative unit from a pool of emission units. The pool shall consist of EU 003, EU 004, EU 005, and EU 006. Once a testing frequency is established, the emission unit to be tested shall be selected from the remaining pool of previously untested emission units. The selection process shall restart once all four units have been tested.	Title I Condition: To avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.3000; Minn. R. 7017.2020, subp. 1

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

03/09/09

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 003

**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**

03/09/09

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 003

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**

03/09/09

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 003

**Subject Item:** EU 002 Compressor engine**Associated Items:** SV 002 Compressor engine

What to do	Why to do it
EMISSION LIMITS	hdr
Opacity: less than or equal to 20 percent once operating temperature is attained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.50 lbs/million Btu heat input . (The potential to emit from the unit is 0.0059 lb/MMBtu due to equipment design and allowable fuels.)	Minn. R. 7011.2300, subp. 2
OPERATING CONDITIONS	hdr
Fuel usage: Natural gas only by design.	Minn. R. 7005.0100, subp. 35a
40 CFR 63, subp. ZZZZ REQUIREMENTS	hdr
At the time of permit issuance, EU 002 is considered an existing affected source under 40 CFR pt. 63, subp. ZZZZ as defined at 40 CFR Section 63.6590(a)(1)(iii). However, this unit meets the criteria in 40 CFR Section 63.6590(b)(3), so no limits, recordkeeping, or notifications apply to this unit.	40 CFR Section 63.6590(a)(1)(iii) and (b)(3); Minn. R. 7011.8150

**TABLE A: LIMITS AND OTHER REQUIREMENTS****A-9**

03/09/09

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 003

**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 B: SUBMITTALS

B-1 03/09/09

Facility Name: Xcel Energy - Wescott LNG Plant  
Permit Number: 03700064 - 003

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

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

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

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

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

Send any application for a permit or permit amendment to:

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

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

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****B-2** 03/09/09

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 003

<b>What to send</b>	<b>When to send</b>	<b>Portion of Facility Affected</b>
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Testing Frequency Plan	due 60 days after Performance Test for NOx emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	GP001



**TABLE B: RECURRENT SUBMITTALS****B-3** 03/09/09

Facility Name: Xcel Energy - Wescott LNG Plant

Permit Number: 03700064 - 003

What to send	When to send	Portion of Facility Affected
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance. The first 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 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: 03700064-003

Insignificant Activities:

<b>Minn. R. 7007.1300, subpart</b>	<b>Activity</b>	<b>Applicable Requirement(s)</b>
3(H)(3)	Brazing, soldering or welding equipment.	Minn. R. 7011.0510/0515, Minn. R. 7011.0610 and Minn. R. 7011.0710/0715
3(I)	Microturbine C30: 433,000 BTU/hr, fuel = natural gas Microturbine C60: 804,000 BTU/hr, fuel = natural gas LP Heater H1: 4,500,000 BTU/hr, fuel = natural gas LP Heater H2: 4,500,000 BTU/hr, fuel = natural gas LP Heater H3: 4,500,000 BTU/hr, fuel = natural gas LNG Control Building Heater 1: 396,000 BTU/hr fuel = natural gas LNG Control Building Heater 2: 396,000 BTU/hr fuel = natural gas Portaheater: 750,000 BTU/hr, fuel = natural gas LP Building Heater: 396,000 BTU/hr, fuel = natural gas 25 kW Emergency Generator: 360,000 BTU/hr, fuel = natural gas Flare: 100,000 BTU/hr, fuel = propane	
3(J)	Fugitive dust from unpaved perimeter roads on facility property.	Minn. R. 7011.0150
3(K)	Infrequent use of spray paint equipment for routine housekeeping or plant upkeep activities not associated with primary production processes at the stationary source, such as spray painting of buildings, machinery, vehicles, and other supporting equipment.	
4	Miscellaneous internal combustion engines burning distillate oil, gasoline, natural gas or propane for generators or compressors VOC fugitives from pumps, valves, flanges VOC fugitive emissions from parts washers	

**TECHNICAL SUPPORT DOCUMENT**  
**For**  
**AIR EMISSION PERMIT NO. 03700064-003**

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

**1. General Information**

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

Applicant/Address	Stationary Source/Address (SIC Code: 4925)
Northern States Power Company dba Xcel Energy 250 Marquette Plaza MP8 Minneapolis, MN 55075	Xcel Energy, Wescott LNG Plant 10326 Robert Trl S Inver Grove Heights Dakota County
Contact: Jonathan Amos, Environmental Analyst Phone: 612-330-7682	

**1.2. Description of the Facility**

Xcel Energy's (Permittee) 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 oxides of nitrogen (NO<sub>x</sub>) and carbon monoxide (CO). The Facility 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 compressor (EU 002) that liquefies inlet natural gas. The compressor also liquefies refrigerant; the refrigerant ensures the natural gas stays cool within the storage tanks. This emission unit is the main source of NO<sub>x</sub> 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 any Updates with this Permit Issuance**

The Total Facility level boilerplate requirements have been updated to reflect current language and requirements.

The particulate matter with an aerodynamic diameter of less than or equal to 2.5 microns (PM-2.5) emissions in this permit are based on the conservative assumption that all emitted particulate matter with an aerodynamic diameter of less than or equal to 10 microns (PM-10) is assumed to be PM-2.5.

The existing group, GP 001, has been restructured to contain only EU 003 through EU 005. These three heaters were installed in the same year, 1997, along with three small heaters classified as insignificant activities. Due to their similar construction times, the sum of the emissions from these six heaters must be evaluated against the federal Prevention of Significant Deterioration (PSD) Program's major modification threshold. Classification as an insignificant activity does not exclude the associated emissions from PSD regulations. The previous GP 001 operating limit of 9,404 hours was not sufficient to ensure the Facility would avoid the PSD major modification threshold. The Facility has elected to alter the operating limit for GP 001 to 7,950 hours. The emission units of GP 001 are also subject to a performance test for NO<sub>x</sub>. In the previous total facility permit, a performance test was required after the operating hours of the units tripped an hourly threshold; this threshold was never tripped. Therefore, the performance test included as a requirement of this reissuance is set to occur within 180 days of the reissuance. The performance test results will be used to verify the manufacturer's emission factor for NO<sub>x</sub>; this emission factor is critical in determining if the Facility's GP 001 operating limit restricts GP 001 NO<sub>x</sub> emissions to less than the PSD major modification threshold.

GP 002 has been created to include emission units subject to 40 CFR pt. 60 subp. Dc. The units comprising this group are EU 003 through EU 006.

Emission Unit 001 has been retired and replaced by a new emission unit, EU 007. The new emission unit is functionally similar to EU 001, but has a smaller heat input than its predecessor. Emission Unit 007 burns natural gas.

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

<b>Permit Number and Issuance Date</b>	<b>Action Authorized</b>
03700064-002 June 29, 2001	MPCA initiated administrative amendment initiating air dispersion modeling policy.

#### **1.5. Facility Emissions:**

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

	PM tpy	PM <sub>10</sub> tpy	PM <sub>2.5</sub> tpy	SO <sub>2</sub> tpy	NO <sub>x</sub> tpy	CO tpy	VOC tpy	Single HAP tpy	All HAPs tpy
Total Facility Limited Potential Emissions	7.24	7.21	7.21	0.479	558	87.5	48.1	8.31	12.9
Total Facility Actual Emissions (2006)	0.67	0.67	Not Reported	0.02	91.38	13.09	3.86	HAPs not reported in emission inventory	

**Table 2. Facility Classification**

<b>Classification</b>	<b>Major/Affected Source</b>	<b>Synthetic Minor</b>	<b>Minor</b>
PSD	NO <sub>x</sub>		PM, PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>x</sub> , CO, VOC
Part 70 Permit Program	NO <sub>x</sub>	CO	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>x</sub> , VOC
Part 63 NESHAP			HAPS

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

### **New Source Review**

The Facility is an existing major source for NO<sub>x</sub> under New Source Review regulations.

### **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).

### 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, but subject to an area source NESHAP:

- 40 CFR pt. 63, subp. ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (EU 002).

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

**Table 3. Regulatory Overview of Facility**

EU, GP, or SV	Applicable Regulations	Comments:
GP 001	Title I Condition: To avoid classification as a major modification under 40 CFR § 52.21 and Minn. R. 7007.3000	Hours of Operation limit taken (7,950 hr/yr) on GP 001. This limit, when used in conjunction with the NO <sub>x</sub> emission factor, is designed to keep NO <sub>x</sub> emissions below PSD major modification threshold for three heaters that were installed within one year of each other.

GP 001	Title I Condition: To avoid classification as a major modification under 40 CFR § 52.21 and Minn. R. 7007.3000	Emission limit of 0.140 lb NO <sub>x</sub> / MMBtu heat input. The Facility relies upon this emission factor and the hours of operation limit to avoid the PSD major modification threshold.
GP 001	Title I Condition: To avoid classification as a major modification under 40 CFR § 52.21 and Minn. R. 7007.3000	Performance Test: Due 180 days after permit issuance to measure NO <sub>x</sub> emission factor. The performance test may be performed on a single representative unit from GP 001 or EU 006. EU 006 is allowed as it is nearly identical to members of GP001 in both design and function.
GP 002 EU 002 EU 007	Minn. R. 7005.0100, subp. 35a	Fuel type is restricted to natural gas by design.
EU 002	Minn. R. 7007.2300	Standards of Performance for Internal Combustion Engines:  SO <sub>2</sub> ≤ 0.50 lbs/MMBtu  Opacity: ≤ 20 percent once operating temp. is attained
EU 003 EU 004 EU 005 EU 006	40 CFR pt. 60, subp. Dc	Standards of Performance for Small and Industrial Commercial and Institutional Steam Generating Units. As natural gas is the only fuel fired, only record keeping applies. <ul style="list-style-type: none"> <li>• the units were constructed after June 9,1989;</li> <li>• the heat input of each unit is less than 100 MMBtu/hr but greater than 10 MMBtu/hr;</li> <li>• the units burn only natural gas</li> </ul> Record and maintain records of the amount of natural gas combusted during each calendar month.

EU 007	Minn. R. 7007.0515	Standards of Performance for New Indirect Heating Equipment. Determination of applicable limit (PM: 0.40 lb / million BTU) from rule: <ul style="list-style-type: none"> <li>the unit was constructed in 2008;</li> <li>the Facility is located in the Metro Air Quality Region in Table I;</li> <li>the unit capacity is less than 250 MMBtu/hr; and</li> <li>the Facility has greater than 250 MMBtu/hr of indirect heating equipment.</li> </ul> Opacity: $\leq 20$ percent except for one six-minute period per hour of not more than 60 percent opacity
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### 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 potential to emit (PTE) for all six units are summed and then evaluated against the PSD major modification threshold. Analysis of AP-42 data indicates that NO<sub>x</sub> is the major pollutant for these units. The PSD major modification threshold for NO<sub>x</sub> is 40 tons per year. 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<sub>x</sub> / MMBtu; this emission factor is higher than the manufacturer's suggested emission factor of 0.12 lb-NO<sub>x</sub> / MMBtu. The limited PTE of NO<sub>x</sub> emissions for six units is detailed below:

#### GP 001

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

NO<sub>x</sub> 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<sub>x</sub> Small Boilers, <100 MMBtu/hr: 50 lb-NO<sub>x</sub>/million ft<sup>3</sup>

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

### Total PTE for the six units

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

The remaining pollutant PTE calculations are detailed in Attachment 1.

The Facility's previous Title V / Pt 70 operating permit included a requirement to conduct a performance test on the glycol/water heaters installed in 1997. The test was to be conducted after the annual operating hours of GP 001 exceeded 6,000 hours. However, the units of GP001 never exceeded 6,000 operating hours in any one year. Because the requirement was never triggered, the test was never done.

Because the Facility is relying on both the NO<sub>x</sub> emission factor and the hours of operation limit to avoid major modification status under PSD, the chosen emission factor of 0.14 lb-NO<sub>x</sub> / MMBtu is subject to a performance test. The results of this test will be used to verify the NO<sub>x</sub> emission factor of 0.140 lb/MMBtu. Once the test is completed, the results will be sent to MPCA to establish an appropriate testing frequency plan.

### 3.0.2. Group 002 (EU 003, EU 004, EU 005, EU 006)

The members of Group 002 are each subject to the requirements of 40 CFR 60, subp. Dc. The permit terms contained in GP 002 are those requirements from Minnesota Rules, Subpart Dc, and General Provisions that apply to each of the boilers.

### 3.0.3. Emission Unit 001

Emission Unit 001 was a regeneration heater. This emission unit was retired and is no longer in service.

### 3.0.4. Emission Unit 002

Emission Unit 002 is a compressor engine subject to 40 CFR 63, subp. ZZZZ. The National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR 63, subp. ZZZZ applies to reciprocating internal combustion engines (RICE) at both area and major sources of hazardous air pollutants (HAPs). The following data result in the determination that EU 002 is an existing affected source:

- Xcel Wescott is an area source of HAPs
- EU 002 is a two-stroke lean burn stationary RICE
- EU 002 was constructed in 1975.

The above data indicate that EU 002 meets the criteria of 40 CFR § 63.6590(b)(3), therefore no limits, recordkeeping, or notifications are required under NESHAP 40 CFR 63, subp. ZZZZ.

### 3.0.5. Emission Unit 007

Emission Unit 007 is a replacement for the now-retired Emission Unit 001. This unit is a regeneration heater. The permit terms contained in EU 001 are those requirements from Minnesota Rules.

### 3.0.5. Fugitive Emissions (FS 001)

The Facility has a number of emission points for fugitive emissions. The Facility has cataloged 8 compressor seals, 252 open-ended lines, 36 pressure relief valves, 4 pump seals, and 213 valves. A United States Environmental Protection Agency (EPA) guidance document entitled, “Protocol for Equipment Leak Emission Estimates” (EPA-453/R-95-017) suggests a method for translating various fugitive emission types into an overall fugitive emission rate. The method entails first tabulating the various types and quantities of emission points, then assigning an appropriate emission factor, and then finally calculating an emission rate. The EPA document offers two sets of emission factors: one is appropriate for the synthetic organic chemical manufacturing industry (SOCMI), while the other is appropriate for the refining industry. The emission factors used in this calculation are from “Table 2.6: SOCMI Screening Ranges Emission Factors” of the EPA document. The chosen emission factors rely upon the assumption that various emission points are not leaking in excess of 10,000 ppmv. The emission factors also rely upon the assumption that the Facility is closer to a synthetic organic chemical manufacturing plant in design rather than a refinery. The decision is based on the determination that the SOCMI emission factors include total volatile organic emissions, while the refinery data do not include methane. Methane is the primary constituent of natural gas; Xcel’s primary function revolves around natural gas. Therefore, the chosen emission factor should account for methane. The fugitive PTE calculations are detailed in Attachment 1.

## **3.1 Calculations of Potential to Emit**

Attachment 1 to this TSD summarizes the PTE of the Facility, contains detailed spreadsheets, and supporting information prepared by the MPCA. The PTE calculations are based on data submitted by the Permittee.

#### Example Calculation (EU 007)

Emission factor for natural gas fueled boilers, <100 MMBtu/hr [AP42 Fifth Edition (7-98): Table 1.4-1]: 84 lb-NO<sub>x</sub>/million ft<sup>3</sup>

Heating Value of natural gas [AP42 Fifth Edition (9-85): Appendix A]: 1,000 Btu/ft<sup>3</sup>

Maximum heat input of EU 007 by design: 12 MMBtu/hr

$(8,760 \text{ hr/yr}) * (12 \text{ MMBtu/hr}) * (84 \text{ lb-NO}_x/\text{million ft}^3) * (1 \text{ ft}^3/1,020 \text{ Btu}) * (1 \text{ ton}/2,000 \text{ lb}) = 4.42 \text{ tons-NO}_x/\text{yr}$

#### Example Calculation for compliance with PM limit (EU 007):

Emission factor for natural gas fueled boilers, <100 MMBtu/hr [AP42 Fifth Edition (7-98): Table 1.4-1]: 7.6 lb-PM/million ft<sup>3</sup>

Limit on PM emissions (Minn. R. 7011.0515): 0.40 lb-PM/MMBtu

EU 007 PM Emissions:  $(7.6 \text{ lb-PM/million ft}^3) * (1 \text{ ft}^3/1,000 \text{ Btu}) = 0.0076 \text{ lb-PM/MMBtu}$

Check AP42 Calculated Emissions against rule limit: 0.0076 lb/MMBtu < 0.40 lb/MMBtu; **OK**

### **3.2 Periodic Monitoring**

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

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

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

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

**Table 4. Periodic Monitoring**

<b>Emission Unit or Group</b>	<b>Requirement (basis)</b>	<b>Additional Monitoring</b>	<b>Discussion</b>
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<b>Emission Unit or Group</b>	<b>Requirement (basis)</b>	<b>Additional Monitoring</b>	<b>Discussion</b>
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 <sup>th</sup> of each month, the Permittee will 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 GP 001.
Heaters: GP 002	Recordkeeping : Fuel Records  (40 CFR § 60.48c(g)(2); Minn. R. 7011.0570)		Fuel Type: Restricted to Natural Gas
Compressor Engine: EU 002	SO <sub>2</sub> ≤ 0.50 lbs/MMBtu  Opacity: ≤ 20 percent once operating temp. is attained  (40 CFR 63, subp. ZZZZ; 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 very small. Design based PTE for the unit, using AP-42, is 0.0059 compared to the rule limit of 0.5 lb/MMBtu.  Because this compressor engine was built before June 12, 2006, it is an existing affected spark ignition two-stroke lean burn stationary 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 limits, recordkeeping, or notifications apply under 40 CFR 63, subp ZZZZ.

<b>Emission Unit or Group</b>	<b>Requirement (basis)</b>	<b>Additional Monitoring</b>	<b>Discussion</b>
Indirect Heating Equipment: EU 007	PM: $\leq 0.40$ lb/MMBtu Opacity: $\leq 20$ % 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.

### 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**

<b>Insignificant Activity</b>	<b>General Applicable Emission limit</b>	<b>Discussion</b>
IA 001: Microturbine C30, IA 002: Microturbine C60	SO <sub>2</sub> $\leq 0.50$ lb/MMBtu 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.

Insignificant Activity	General Applicable Emission limit	Discussion
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: $\leq 20\%$ with exceptions (Minn. R. 7011.0610)	<p>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<sub>x</sub> 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.</p> <p>Design based PTE for each unit, using AP-42, is calculated in the Attachment 1.</p>
IA 010: 25 kW Emergency Generator	SO <sub>2</sub> $\leq 0.50$ lb/MMBtu Opacity $\leq 20\%$ (40 CFR § 63, subp. ZZZZ and Minn. R. 7011.2300)	<p>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.</p> <p>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.</p>
IA 011: Flare	Opacity: $\leq 20\%$ with exceptions (Minn. R. 7011.0610)	<p>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.</p>

<b>Insignificant Activity</b>	<b>General Applicable Emission limit</b>	<b>Discussion</b>
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: 1/16/2009 – 2/16/2009

EPA 45-day Review Period: 1/16/2009 – 3/4/2009

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

Comments were not received from EPA during their review period.

## **4. Conclusion**

Based on the information provided by Xcel Energy Wescott LNG, the MPCA has reasonable assurance that the operation of the emission Facility, as described in the Air Emission Permit No. 03700064-003 and this technical support document, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team:      Jeffrey Hedman (permit writer/engineer)  
Cary Hernandez (enforcement)  
Curtis Stock (stack testing)  
Marshall Cole (peer reviewer)

AQ File No. 202T; DQ 448

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