

AIR EMISSION PERMIT NO. 04300002- 004

IS ISSUED TO

Board of Public Works

Blue Earth Light & Water
124 East 6th Street
Blue Earth, Faribault County, MN 56013

The emission units, control equipment and emission stacks at the stationary source authorized in this permit are as described in the following permit application(s):

Permit Type	Application Date	Issuance Date	Action Number
Total Facility Operating Permit	01/29/1999	08/24/1999	001
Administrative Amendment	01/20/2000	03/21/2000	002
Major Amendment	05/03/2002	Application Withdrawn	003
Major Amendment	09/06/2002	see below	004

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

Permit Type: Federal; Part 70/Limits to Avoid NSR

Issue Date: March 3, 2003

Expiration: August 24, 2004

Title I Conditions do not expire.

Ann M. Foss
Major Facilities Section Manager
Majors and Remediation Division

for Sheryl Corrigan
Commissioner
Minnesota Pollution Control Agency

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Facility Description

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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:

This facility is a small municipal electric generating plant composed of 1 boiler and 6 reciprocating internal combustion engines. The facility provides standby electric generation.

AMENDMENT (ACTION 002)

PER 002 was an administrative amendment to extend the opacity testing deadline for the boilers and generators by 120 days

AMENDMENT (ACTION 003)

PER 003 was an application to revise title V modeling requirements that was subsequently withdrawn.

AMENDMENT (ACTION 004)

This major amendment permit action increases the total facility NOx emission cap from 225 tons per year to 235 tons per year on a 12-month rolling sum basis, as requested by the Permittee. In addition the opacity testing requirements have been revised so that testing is now on a 60-month frequency, based on past test results and Minnesota Pollution Control Agency test frequency guidance. Finally, the permit has been updated to acknowledge the removal of boilers 2 and 3 (EU 002 and EU 003).

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/03/03

Facility Name: Blue Earth Light & Water
 Permit Number: 04300002 - 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
Nitrogen Oxides: less than or equal to 470000 lbs/year (235 tons per year) based on a 12-month rolling sum.	Title I Condition: To limit potential NOx emissions to less than major source levels as defined by 40 CFR Section 52.21
Fuel Usage Records: Maintain records on site of the type and amount of each fuel burned in each emission unit. Daily usage of natural gas and distillate fuel oil shall be determined with fuel meters and recorded each day that fuel is combusted. By the 15th day of each month, the fuel usage for each emission unit for the previous 12 months shall be summed to obtain the 12-month fuel usage for the emission unit. The 12-month fuel usage shall be used for calculating 12-month rolling sum NOx emissions as required by this permit.	Title I Condition: To limit potential NOx emissions to less than major source levels as defined by 40 CFR Section 52.21
By the 15th day of each month, calculate the previous 12-month rolling sum of NOx emissions. The 12-month fuel usage for each emission unit shall be used in the equation below to determine the rolling 12-month sum of NOx emissions. [0.10 * (mcf of natural gas used by EU 006)]+ [3.40 * (mcf of natural gas used by EU 004)]+ [0.02 * (gallons of distillate oil used by EU 006)]+ [0.442 * (gallons of distillate oil by EU 004)]+ [0.665 * (gallons of distillate oil used by EU 005)]+ [0.423 * (gallons of distillate oil used by EU 007, 008, and 009)]+ [0.347 * (gallons of distillate oil used by EU 011)] = lb NOx per year mcf = 1000 cubic feet	Title I Condition: To limit potential NOx emissions to less than major source levels as defined by 40 CFR Section 52.21
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, B, and/or C.	Minn. R. ch. 7017
Performance Test Notifications and Submittals: Performance Tests are due as outlined in GP 002 and EU 006 in Table A of this permit. 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 and Minn. R. 7017.2035, subp. 1-2
Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/03/03

Facility Name: Blue Earth Light & Water

Permit Number: 04300002 - 004

<p>Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3.</p> <p>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.</p>	<p>Minn. R. 7019.1000, subp. 3</p>
<p>Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2.</p> <p>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.</p>	<p>Minn. R. 7019.1000, subp. 2</p>
<p>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.</p>	<p>Minn. R. 7019.1000, subp. 1</p>
<p>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:</p> <ol style="list-style-type: none"> 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. 	<p>Minn. R. 7019.1000, subp. 1</p>
<p>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.</p>	<p>Minn. R. 7019.1000, subp. 4</p>
<p>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.</p>	<p>Minn. R. 7011.0150</p>
<p>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.</p>	<p>Minn. R. 7007.1150 through Minn. R. 7007.1500</p>
<p>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).</p>	<p>Minn. R. 7007.1400, subp. 1(H)</p>
<p>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.</p>	<p>Minn. R. 7007.0800, subp. 5(B)</p>
<p>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).</p>	<p>Minn. R. 7007.0800, subp. 5(C)</p>
<p>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.</p>	<p>Minn. R. 7030.0010 - 7030.0080</p>
<p>The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.</p>	<p>Minn. R. 7007.0800, subp. 16</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/03/03

Facility Name: Blue Earth Light & Water

Permit Number: 04300002 - 004

Inspections: Upon presentation of credentials and other documents as may be required by law, allow the Agency, or its representative, to enter the Permittee's premises to have access to and copy any records required by this permit, to inspect at reasonable times (which include any time the source is operating) any facilities, equipment, practices or operations, and to sample or monitor any substances or parameters at any location.	Minn. R. 7007.0800, subp. 9(A)
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/03/03

Facility Name: Blue Earth Light & Water

Permit Number: 04300002 - 004

Subject Item: GP 002 Reciprocating Engines

- Associated Items:** EU 004 Engine #1 (Nordberg)
 EU 005 Engine #2 (Cat 1825 kW)
 EU 007 Engine #3 (Cat 1600 kW)
 EU 008 Engine #4 (Cat 1600 kW)
 EU 009 Engine #5 (Cat 1600 kW)
 EU 011 Emergency Station Power

What to do	Why to do it
EMISSION LIMITS (apply individually to each emission unit)	hdr
Sulfur Content of Fuel: less than or equal to 0.05 percent	40 CFR Section 72.7(a)(3); meets requirements of Minn. R. 7011.2300, subp. 2
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
OPERATING CONDITIONS	hdr
Burn only pipeline natural gas and low sulfur distillate fuel oil in EU 004, and low sulfur distillate fuel oil in EU 005, 007, 008, 009, and 011.	Minn. R. 7007.0800, subp. 2
MONITORING	hdr
Fuel Supplier Certification: The Permittee shall obtain a certification from the distillate fuel oil supplier specifying the sulfur content in percent by weight, for each fuel oil delivery.	Minn. R. 7007.0800, subp. 4
PERFORMANCE TESTING	hdr
Performance Test: due before end of each calendar 60 months starting 03/21/2000 to measure opacity of each emission unit in GP 002.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/03/03

Facility Name: Blue Earth Light & Water

Permit Number: 04300002 - 004

Subject Item: EU 006 Boiler #4 (6 mmBtu/hr)**Associated Items:** SV 006 Boiler #4 (6 mmBtu/hr)

What to do	Why to do it
EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input	Minn. R. 7011.0515, subp. 1
Sulfur Dioxide: less than or equal to 2 lbs/million Btu heat input based on a one (1) hour averaging period for liquid fossil fuels.	Minn. R. 7011.0550, subp. 2 liquid fuels
OPERATING CONDITIONS	hdr
Fuels: Burn only distillate fuel oil as defined by ASTM, and pipeline natural gas.	Minn. R. 7007.0800, subp. 2
MONITORING	hdr
Fuel Supplier Certification: The Permittee shall obtain a certification from the distillate fuel oil supplier specifying the sulfur content in percent by weight, for each fuel oil delivery.	Minn. R. 7007.0800, subp. 4
PERFORMANCE TESTING	hdr
Performance Test: due before end of each calendar 60 months starting 03/21/2000 to measure opacity of each emission unit in GP 002.	Minn. R. 7007.0800, subp. 2

TABLE B: SUBMITTALS

03/03/03

Facility Name: Blue Earth Light & Water
Permit Number: 04300002 - 004

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

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

Send any application for a permit or permit amendment to:

Permit Technical Advisor
Permit Section
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

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

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

Unless another person is identified in the applicable Table, send all other submittals to:

Supervisor
Compliance Determination Unit
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

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

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

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204N)
Washington, D.C. 20460

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

03/03/03

Facility Name: Blue Earth Light & Water

Permit Number: 04300002 - 004

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Computer Dispersion Modeling Protocol	due 1096 days after 08/24/1999 for NOx. This protocol will describe the proposed modeling methodology and input data, in accordance with all requirements of 40 CFR pt. 51, App. W. The protocol will be based on projected operating conditions under the next permit term. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Total Facility
Computer Dispersion Modeling Results	due 1462 days after 08/24/1999 To be submitted after the MPCA has reviewed and approved the modeling protocol. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Total Facility

TABLE B: RECURRENT SUBMITTALS

03/03/03

Facility Name: Blue Earth Light & Water

Permit Number: 04300002 - 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 08/24/1999 . The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31.	Total Facility
Compliance Certification	due 31 days after end of each calendar year starting 08/24/1999 (for the previous calendar year). To be submitted on a form approved by the Commissioner <, both to the Commissioner, and to the U.S. EPA regional office in Chicago>. This report covers all deviations experienced during the calendar year. < The EPA copy shall be sent to: Mr. George Czerniak, Chief, Air Enforcement and Compliance Assurance Branch, Air and Radiation Division, EPA Region V, 77 West Jackson Boulevard, Chicago, Illinois 60604>	Total Facility
Emissions Inventory Report	due 91 days after end of each calendar year starting 08/24/1999 (April 1). To be submitted on a form approved by the Commissioner.	Total Facility

APPENDIX MATERIAL

Facility Name: Blue Earth Light & Water

Permit Number: 04300002-004

Numbering Cross Reference List for Title IV Affected Units

Emission Unit Number	Facility I.D.	Acid Rain Unit Number
EU005	Engine #2 (Cat 1825 kw)	10
EU007	Engine #3 (Cat 1600 kw)	7
EU008	Engine #4 (Cat 1600 kw)	8
EU009	Engine #5 (Cat 1600 kw)	9
EU011	Emergency Station Power	11

New Unit Exemption

For more information, see instructions and refer to 40 CFR 72.7

This submission is Original Revised

Step 1

Identify the new unit by plant name, State, ORIS Code (if assigned) and Unit ID#.

Blue Earth Light and Water	MN		7, 8, 9, 10, 11
Plant Name	State	ORIS Code	Unit ID#

Step 2

List to one decimal place the nameplate capacity of each generator served by the unit. Then total these entries and enter the result.

Unit 7: 1.6 Unit 8: 1.6 Unit 9: 1.6 Unit 10: 1.8 Unit 11: 0.5 MWe	MWe	MWe	MWe	MWe	Total MWe
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Step 3

List all fuels currently burned or expected to be burned, by the unit and the percent sulfur content by weight of each.

Content	Fuel (current)	Sulfur Content (current)	Fuel (expected)	Sulfur (expected)
	#2 Diesel	<0.05%	#2 Diesel	<0.05

Step 4

Identify the first full calendar year in which the unit meets (or will meet) the requirements of 40 CFR 72.7(a).

January 1, Unit 7: 1995
Unit 8: 1995
Unit 9: 1995
Unit 10: 1996
Unit 11: 1999

Special Provisions

step 5

Read the special provisions.

- (1) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under 40 CFR 72.7 shall (i) comply with the requirements of 40 CFR 72.7(a) for all periods for which the unit is exempt under 40 CFR 72.7 and (ii) comply with the requirements of the Acid Rain Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
- (2) For any period for which a unit is exempt under 40 CFR 72.7, the unit is not an affected unit under the Acid Rain Program and 40 CFR parts 70 and 71 and is not eligible to be an opt-in source under 40 CFR part 74. As an unaffected unit, the unit shall continue to be subject to any other applicable requirements under 40 CFR parts 70 and 71.
- (3) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under 40 CFR 72.7 shall retain at the source that includes the unit records demonstrating that the requirements of 40 CFR 72.7(a) are met. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Administrator or the permitting authority. Such records shall include, for each delivery of fuel to the unit or for fuel delivered to the unit continuously by pipeline, the type of fuel, the sulfur content, and the sulfur content of each sample taken. The owners or operators bear the burden of proof that the requirements of paragraph 40 CFR 72.7(a) are met.
- (4) On the earliest of the following dates, a unit exempt under 40 CFR 72.7(b), (c), or (e) shall lose its exemption and become an affected unit under the Acid Rain Program and 40 CFR parts 70 and 71: (i) the date on which the unit first serves one or more generators with total nameplate capacity in excess of 25 MWe; (ii) the date on which the unit burns any coal or coal-derived fuel except for coal-derived gaseous fuel with a total sulfur content no greater than natural gas; or (iii) January 1 of the year following the year in which the annual average sulfur content for gaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR 72.7(d)) or for nongaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR 72.7(d)). Notwithstanding 40 CFR 72.30(b) and (c), the designated representative for a unit that loses its exemption under 40 CFR 72.7 shall submit a complete Acid Rain permit application on the later of January 1, 1998 or 60 days after the first date on which the unit is no longer exempt. For the purpose of applying monitoring requirements under 40 CFR 75, a unit that loses its exemption under 72.7 shall be treated as a new unit that commenced commercial operation on the first date on which the unit is no longer exempt.

TECHNICAL SUPPORT DOCUMENT
For
DRAFT AIR EMISSION PERMIT NO. 04300002-004

This technical support document is for all the interested parties of the draft permit. The purpose of this document is to set forth the legal and factual basis for the draft permit conditions, including references to the applicable statutory or regulatory provisions.

1. General Information

1.1. Applicant and Stationary Source Location:

Owner/Operator Address and Phone Number (list both if different)	Facility Address (SIC Code: 4911)
City of Blue Earth Board of Public Works 125 East 6 th Street Blue Earth, Minnesota (507) 526-2191 (Curt LaMaack)	Blue Earth Light and Water 124 East 6 th Street Blue Earth, Minnesota

1.2. Description Of The Facility

This facility is a small municipal electric generating plant composed of 1 boiler and 6 reciprocating internal combustion engines. The facility provides standby electric generation.

1.3 Description of the Activities Allowed By This Permit Action

This permit action increases the total facility NO_x emission cap from 225 tons per year to 235 tons per year, on a 12-month rolling sum basis. In the permit application, the Permittee requested an increase of the limit to 249 tons per year, but this is not acceptable due to the lack of real-time continuous NO_x monitoring. In addition, the requirement to conduct opacity performance testing on all combustion sources has been revised so that testing is now on a 60-month frequency, based on the results of the 2000 testing and MPCA performance testing guideline. Finally, the facility has removed boilers 2 and 3 (EU 002 and EU 003), and the permit has been updated to reflect this.

1.4. Facility Emissions:

Table 1. Total Facility Potential to Emit Summary:

	PM tpy	PM ₁₀ tpy	SO ₂ tpy	NO _x tpy	CO tpy	VOC tpy	Pb tpy	HAPs tpy
Total Facility Limited Potential Emissions*	4.9	4.9	3.8	235	45	15.3	-	-
Total Facility Actual Emissions*	0.62	0.62	0.47	7.4	2.5	0.72	NR	NR

Table 2. Permit Action Classification

Classification	Major/Affected Source	*Synthetic Minor	*Minor
PSD		NO _x ,	PM, PM ₁₀ , SO ₂ , CO, VOC, Pb
NAAR	NA	NA	NA
Part 70 Permit Program	NO _x	CO	PM ₁₀ , SO ₂ , VOC, HAPs

* Refers to potential emissions that are less than those specified as major by 40 CFR § 52.21, 40 CFR pt. 51 Appendix S, and 40 CFR pt. 70.

2. Regulatory and/or Statutory Basis

Summary Regulatory and/or Statutory Basis of the Emission or operational Limit

Regulatory Overview of Units Affected by the Modification

Table 4. Regulatory Overview

Subject Item	Applicable Regulations	**Comments
Total Facility	40 CFR § 52.21	Title I Conditions to limit NO _x emissions to less than major source level as defined by 40 CFR § 52.21

3. Technical Information

Environmental Review: This permitting action does not require any environmental review.

Total Facility NOx Emission Limit: The Permittee submitted an application for a major amendment requesting an increase in the total facility NOx limit from 225 tpy to 249 tpy. The facility does not use CEMS to measure NOx, so the NOx limit was only increased to 235 tpy. This reduced increase is appropriate to maintain a buffer between the permit limit and the 250 ton per year major source threshold that is necessary due to possible inaccuracies in NOx emission factors used to calculate NOx emissions.

NOx Emission Factors: The Permittee has submitted manufacturer's emissions data for some of the emission units. The data was used for emissions calculations for this major amendment. Note that for large bore stationary reciprocating engines, AP-42 Table 3-4.1 lists NOx emission factors of 3.2 lb/mmBtu for diesel fuel, and 2.7 lb/mmBtu for dual fuel firing (95% natural gas and 5% diesel fuel). The following table lists emission factors in units of lb/mmBtu based on the manufacturer's emission rates (in parenthesis in lb/hr) and manufacturer's rated heat input, unless an AP-42 factor was used:

Pollutant	Emission Unit						
	EU 004 dual fuel RICE*	EU 005 distillate oil RICE	EU 006 gas/oil boiler	EU 007 distillate oil RICE	EU 008 distillate oil RICE	EU 009 distillate oil RICE	EU 011 distillate oil RICE
CO	AP-42	0.47 lb/mmBtu (8.38 lb/hr)	AP-42	0.59 lb/mmBtu (9.6 lb/hr)	0.59 lb/mmBtu (9.6 lb/hr)	0.59 lb/mmBtu (9.6 lb/hr)	0.08 lb/mmBtu (0.42 lb/hr)
NOx	AP-42	4.75 lb/mmBtu (84.36 lb/hr)	AP-42	3.02 lb/mmBtu (49.1 lb/hr)	3.02 lb/mmBtu (49.1 lb/hr)	3.02 lb/mmBtu (49.1 lb/hr)	2.48 lb/mmBtu (12.8 lb/hr)
PM	AP-42	0.047 lb/mmBtu (8.38 lb/hr)	AP-42	0.06 lb/mmBtu (1.0 lb/hr)	0.06 lb/mmBtu (1.0 lb/hr)	0.06 lb/mmBtu (1.0 lb/hr)	0.13 lb/mmBtu (0.67 lb/hr)
PM ₁₀	AP-42	same as PM	AP-42	same as PM	same as PM	same as PM	same as PM
SO ₂	AP-42	AP-42	AP-42	AP-42	AP-42	AP-42	AP-42
VOC	AP-42	0.08 lb/mmBtu (1.41 lb/hr)	AP-42	0.1 lb/mmBtu (1.6 lb/hr)	0.1 lb/mmBtu (1.6 lb/hr)	0.1 lb/mmBtu (1.6 lb/hr)	0.03 lb/mmBtu (0.14 lb/hr)

*reciprocating internal combustion engine

**M = Manufacturer's emission rate

Title V Modeling: This facility is composed of several RICE. As a result, the full title V modeling requirements have been retained in this permit. In spring 2002 the Permittee applied for a major amendment to revise the modeling requirements. However, due to the type of the facility, the Permittee was informed that it could either run the SCREEN3 modeling as described in the current EC-03 form, and if the results showed no concerns, the revision would be made, or just complete the full modeling requirements as the permit required. The Permittee opted to complete the full modeling requirements. See the 'NOx modeling letter' under PER 003 for additional information.

Comments Received During Public Notice And EPA Review Period: No comments were received during the public comment period. Jennifer Darrow of US EPA Region 5 called on Feb 25, 2003, and indicated that she had no comments and the amendment could be issued before the end of the 45-day review period (which would have been March 31, 2003).

See the technical support document for PER 001 for additional information.

4. Conclusion

Based on the information provided by Blue Earth Light and Water/Board of Public Works, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 04300002-004 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: Marshall Cole, Jelil Abdella, Jenny Reinertsen (peer review)