

AIR EMISSION PERMIT NO. 04900005- 002

IS ISSUED TO

Northern States Power Co. d/b/a Xcel Energy

NSP d/b/a Xcel Energy - Red Wing
801 5th Street East
Red Wing, Goodhue County, MN 55066

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	Issue Date
Total Facility Operating Permit	6/1/2004
MPCA-Initiated Major Amendment	

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

Permit Type: Federal; Pt 70/Major for NSR

Issue Date: 06/01/2004

Expiration: 06/01/2009

All Title I Conditions do not expire.

Major Amendment

Issue Date: 08/08/2005

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for Sheryl A. Corrigan
Commissioner
Minnesota Pollution Control Agency

RJS/EF:lh

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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:

Permit Action 001:

The Red Wing Plant is an electric power generating station located along the Mississippi River in Red Wing Minnesota. The Red Wing plant is rated at 25 Megawatts (MW) and has two boilers that primarily burn Refuse Derived Fuel (RDF). The RDF burned at this facility is processed under contract with the Elk River Resource Recover Facility in Elk River, Minnesota; and the Ramsey/Washington Resource Recovery Facility in Newport, Minnesota.

Energy is produced through combustion of RDF in two traveling grate boilers. The units are identified in the permit as emissions units 1 and 2 (EU 001 and EU 002). The units are 180 Million Btu/hr each, which equates 16.4 tons of RDF per hour (at an assumed heat content of 5,500 Btu/lb.). The combustors can also burn natural gas. The boilers were installed in 1947. The Permittee was issued a permit to convert to burn RDF in 1984.

Each boiler exhausts through separate pollution control equipment, dry lime injection for the control of acid gases and a baghouse for the control of Particulate Matter (PM) and a 187-ft. tall stack. Exhaust gases from each boiler are continuously monitored for Carbon Monoxide (CO), Sulfur Dioxide (SO₂), Nitrogen Oxides (NO_x), opacity, and Oxygen (O₂). A number of operating parameters, including baghouse inlet temperature, and steam flow rate, are also monitored continuously.

Hot water for internal use when the EU 001 and EU 002 are down is provided by a natural gas-fired boiler.

Ash produced in the course of waste combustion is stored in an enclosed area at the facility. The ash is transported using covered trucks to the Red Wing Ash Landfill (permit number SW-307). Other sources of PM emissions are the lime storage silo and RDF receiving building.

Permit Action 002:

Permit action 002 is a MPCA-initiated major amendment under Minn. R. 7007.1600, subp. 1 (D) – mandatory reopenings that are needed to assure compliance with applicable requirements.

The amendment incorporates new limits for EU 001 and EU 002 into the permit. The limits have been imposed through performance testing under Minn. R. 7017.2025, subp. 3. The permit must be reopened in order to reflect the revised limits. See MPCA Notice of Compliance letters dated June 7, 2004 and February 17, 2005 to NSP d/b/a Xcel Energy-Red Wing (Permittee).

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing

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

Subject Item:**Total Facility**

What to do	Why to do it
OPERATIONAL LIMITS	hdr
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit.	Minn. R. 7017.2025
Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
Permittee will operate the facility in accordance with the solid waste management requirements as set forth in Minn. R. 7011.1245 items A to H. Plans required shall identify those required portions of the plan which are not applicable.	Minn. R. 7011.1245(A)-(H)
Fugitive Dust 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
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
PLANS	hdr
INDUSTRIAL SOLID WASTE MANAGEMENT PLAN: Permittee shall prepare and maintain a plan for management of industrial solid waste in accordance with Minn. R. 7035.2535, subp. 5, items A and B. The plan shall include the contents listed in Minn. R. 7011.1250, subp. 2. Permittee shall modify the industrial waste management plan whenever the management practices or solid waste identified in the plan have changed. Permittee shall submit the plan and amended plan to the commissioner for approval. This is a state only requirement.	Minn. R. 7011.1250, subp. 1 Minn. R. 7011.1250, subp. 3
Ash Toxicity: Abide by a plan to reduce the level of toxic contaminants in ash, consistent with Minn. R. 7007.0501, subp. 6(A).	Minn. R. 7007.0501, subp. 6
Abide by a plan for the disposal and/or utilization of ash and quench water consistent with Minn. R. 7007.0501, subp. 7.	Minn. R. 7007.0501, subp. 7
Abide by the industrial waste management plan prepared in accordance with Minn. R. 7011.1250. This is a state only requirement.	Minn. R. 7007.0801, subp. 2(E)
Prepare and keep the following plans with the Operating Manual. A. security requirements in part 7035.2535, subp. 3; B. general inspection requirements in part 7035.2535, subp. 4; C. household hazardous waste management requirements of part 7035.2535, subp. 6, D. emergency preparedness and prevention plans and emergency procedures shall be prepared in accordance with parts 7035.2595 and 7035.2605. E. contingency action plans in part 7035.2615; F. closure plans and procedures in part 7035.2625; G. solid waste transfer facility requirements as required in Minn. R. 7035.2865; and H. infectious waste management plan (if Permittee chooses to accept infectious waste), in accordance with Minn. R. 7035.9100 to 7035.9150. I. a plan for handling waste that has not been processed into refuse derived fuel (RDF). Plans shall be prepared within 90 days of permit issuance if not completed on the date of permit issuance.	Minn. R. 7011.1245(A)-(H) Minn. R. 7007.0800, subp. 2
Provide a waste composition study (conducted on the waste stream from which the RDF is produced) every five years as described in Minn. R. 7007.0501, subp. 2(A). The Waste Composition Study and Sample Analysis Report is due 45 days after the end of each five years starting 12/31/2002.	Minn. R. 7011.1270 (A)(6)

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing

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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 shall include a preventative maintenance program for that equipment, a description of (the minimum but not necessarily the only) corrective actions to be taken to restore the equipment 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 the records kept to demonstrate plan implementation. The Permittee will incorporate operation and maintenance requirements for the air pollution control equipment into the Operating Manual required under Minn. R. 7011.1275, subp. 3.	Minn. R. 7007.0800, subp. 14; and Minn. R. 7007.0800, subp. 16(J)
Ash Testing Plan: Submit ash testing plan and amendments to the plan to the Regional Environmental Management, Metro Region, Regular Waste Management and Wastewater Sector Unit for approval. The plan must contain the information in Minn. R. 7035.2910, subp. 6(A) - (H). This is a state only requirement.	Minn. R. 7007.0801, subp. 2(D); Minn. R. 7035.2910, subp. 6
POLLUTION CONTROL EQUIPMENT	hdr
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)
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
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 3
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
TESTING REQUIREMENTS	hdr
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A, and/or B.	Minn. R. ch. 7017
Performance Test Notifications and Submittals: Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements. Performance Test Notification (written): due 30 days before each Performance Test Performance Test Plan: due 30 days before each Performance Test Performance Test Pre-test Meeting: due 7 days before each Performance Test Performance Test Report: due 45 days after each Performance Test Performance Test Report - 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. Rs. 7017.2030, subp. 1-4, 7017.2018 and Minn. R. 7017.2035, subp. 1-2
Ash Testing: Conduct ash sampling at least quarterly in accordance with Minn. R. 7035.2910 to form an annual composite sample. The permittee shall analyze the annual composite sample in accordance with Minn. R. 7035.2910, subp. 4, item A, tables 1 and 2. This is a state only requirement.	Minn. R. 7035.2910, subp. 3 Minn. R. 7000.7000 MSW Ash Combustor Variance of October 1996
MONITORING REQUIREMENTS	hdr
Monitoring Equipment: Install or make needed repairs to all 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)

TABLE A: LIMITS AND OTHER REQUIREMENTS

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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, 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
Permittee shall maintain records adequate to document compliance at the stationary source, including at a minimum: (1) the date, place, and time of sampling or measurement; (2) the date or dates the analyses were performed; (3) the company or entity that performed the analyses; (4) the analytical techniques or methods used; (5) the results of such analyses; and (6) the operating conditions existing at the time of sampling or measurement	Minn. R. 7007.0800, subp. 5(A)
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)
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)
REPORTING/MISCELLANEOUS	hdr
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
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)
Insignificant Activities: Comply with the conditions set forth in Appendix III of Additional Appendix Materials of this Permit.	Minn. R. 7007.0800, subp. 2
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
Extension Requests: 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)
Ash Testing Report: Submit an annual ash testing report to the Commissioner by March 15 of each year. The report must contain at a minimum the information in Minn. R. 7035.2910, subp. 10, items A - F. This is a state only requirement.	Minn. R. 7035.2910, subp. 10
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

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing

Permit Number: 04900005 - 002

Subject Item: GP 001 Waste Combustors**Associated Items:** EU 001 Boiler 1

EU 002 Boiler 2

What to do	Why to do it
The requirements of this section of this permit apply to EU 001 and EU 002 and the associated monitors, control equipment, and stacks individually unless explicitly stated otherwise.	hdr
OPERATIONAL LIMITS/REQUIREMENTS	hdr
Permittee shall comply with Minn. R. 7011.1201 to 7011.1290.	Minn. R. 7011.1215, subp. 1
EMISSION LIMITS	hdr
<p>Applicability of Standards: the standards of Minn. R. 7011.1227, 7011.1228, and 7011.1240, subps. 2 and 5 apply at all times when RDF is being continuously burned. The standards do not apply, up to a maximum of three hours, during periods of start-up, shutdown or malfunction.</p> <p>Fugitive emissions standards applicable to the ash conveying system do not apply during periods of maintenance and repair of the ash conveying system.</p> <p>The standards of Minn. R. 7011.0510 apply at all times when operating on permitted fuels other than RDF.</p>	<p>Minn. R. 7011.1215, subp. 4</p> <p>Minn. R. 7011.0505, subp. 1</p>
<p>Applicability of Standards: (continued)</p> <p>For the purposes of determining when the standards of Minn. R. 7011.1227, 7011.1228, 7011.1240, and 7011.0510 apply during a fuel switch from RDF to another permitted fuel, the Permittee shall determine the grate distance traveled after the RDF feed has stopped as follows:</p> <ul style="list-style-type: none"> - continuously monitor and record the grate speed after RDF feed has stopped, until the fuel switch from RDF is complete - calculate, at least once per minute, the distance traveled since RDF feed stopped - sum the calculated distances <p>When the summed distance traveled after the RDF feed has stopped is equal to the furnace depth multiplied by a safety factor of 1.1, the ash bed will be considered cleared of the traveling grate and the fuel switch from RDF will be considered complete.</p>	<p>Minn. R. 7011.1215, subp. 4</p> <p>Minn. R. 7011.0505, subp. 1</p> <p>(continued)</p>
Applicability of Standards: Permittee shall not cause to be emitted into the atmosphere when combusting RDF gases with concentrations in excess of the standards of performance shown in parts 7011.1227, 7011.1228. These limits apply to EU 001 and EU 002 individually unless an average limit over both units is explicitly stated. Emissions (except for opacity) shall be calculated under standard conditions corrected to seven percent oxygen on a dry volume basis.	Minn. R. 7011.1225, subp. 1(A)
Permittee shall not cause to be emitted into the atmosphere visible emissions of combustion ash from an ash conveying system, including conveyor transfer points, in excess of five percent of the observation period (i.e., 9 minutes per three-hour period), as determined by Code of Federal Regulations, title 40, part 60, Appendix A, Method 22, as amended. This limit does not apply to visible emissions discharged inside buildings or enclosures of ash conveying systems; however, the emission limit does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems.	Minn. R. 7011.1225, subp. 1(B)
Front-half Particulate Matter: less than or equal to 0.012 grains/dry standard cubic foot , front-half.	Minn. R. 7011.1227, Table 1, Minn. R. 7011.1225, subp. 1;
Total Particulate Matter: less than or equal to 0.020 grains/dry standard cubic foot , total.	Minn. R. 7011.1227, Table 1; Minn. R. 7011.1225, subp. 1;
Total Particulate Matter: less than or equal to 0.6 lbs/million Btu heat input	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 10 percent opacity	Minn. R. 7011.1227, Table 1;
Opacity: less than or equal to 20 percent except for one six-minute period per hour of not more than 60 percent opacity.	Minn. R. 7011.0510, subp. 2
Sulfur Dioxide: less than or equal to 29 parts per million using 24-hour Geometric Average or 75 percent reduction of sulfur dioxide, which ever is less stringent.	Minn. R. 7011.1227, table 1
Carbon Monoxide: less than or equal to 200 parts per million using 24-hour Block Average .	Minn. R. 7011.1227, Table 1

TABLE A: LIMITS AND OTHER REQUIREMENTS

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Nitrogen Oxides: less than or equal to 250 parts per million using 24-hour Block Average for each individual unit or less than or equal to 230 ppmv when averaged over all combustor units.	Minn. R. 7011.1228, Table A; Minn. R. 7011.1228, Table B;
Nitrogen Oxides Emissions Averaging: Before permittee may implement emissions averaging to demonstrate compliance with the nitrogen oxides emission limit, the permittee shall identify units that are included in the nitrogen oxides emissions averaging plan in either 1) the compliance report required by Minn. R. 7017.2035 that contains the results of the units' initial performance tests required by Minn. R. 7011.1270, item A, subitem (1); or 2) in the annual report required in part 7011.1285, as applicable prior to implementing the averaging plan. The units being included in the averaging plan may be redesignated every calendar year. Partial year averaging is allowable upon written commissioner approval. Average must be calculated in accordance with 40 CFR 60.33b(d)(1)	Minn. R. 7011.1228
Lead: less than or equal to 440 micrograms/DSCM .	Minn. R. 7011.1227, Table 1
Muni Waste Combust Organics: less than or equal to 30 nanograms/DSCM measured as Total PCDD/PCDF.	Minn. R. 7011.1227, Table 1
Cadmium compounds: less than or equal to 40 micrograms/DSCM measured as cadmium.	Minn. R. 7011.1227, Table 1
Hydrochloric acid: less than or equal to 29 parts per million ; or 95% control, whichever is less stringent.	Minn. R. 7011.1227, Table 1
Mercury: less than or equal to 50 micrograms/DSCM ; or 85% removal (short term), whichever is less stringent.	Minn. R. 7011.1227, Table 1
Mercury: less than or equal to 30 micrograms/DSCM ; or 85% removal (long-term), whichever is less stringent.	Minn. R. 7011.1227, Table 1
OPERATIONAL LIMITS	hdr
For purposes of determining when the standards Minn. of R. 7011.1227, 7011.1228, and 7011.1240, subps. 2 and 5 or Minn. R. 7011.0510 apply, during a fuel switch from RDF to another permitted fuel and vice versa, the Permittee shall determine the grate travel distance as follows: - Continuously monitor and record the grate speed - Calculate, at least once per minute, the distance traveled - Sum the calculated distances.	Minn. R. 7007.0800, subp. 2
Start-up on Waste Prohibited: During start-up from a cold furnace, use natural gas to achieve combustion chamber operating temperature.	Minn. R. 7011.1240. subp. 3
Auxiliary Fuel Use: Use natural gas to warm the combustion and pollution control devices and maintain good combustion conditions in the combustion chamber from the time the RDF feed has been discontinued until the combustion chamber is clear of combustible material or active combustion ceases.	Minn. R. 7007.0800, subp. 2
Allowed and Prohibited Fuels: The waste combustor may burn natural gas, wood, used oil generated on site, RDF as defined in Minn. Stat. 115A.03, subp. 21, except as noted elsewhere in Table A. Used oil shall be burned at a rate no greater than 180 gallons per hour. Used oil means on-specification oil defined in Minn. R. 7045.0020, subp. 60a and sorbents that hold the used oil. Permittee shall not combust yard waste or tires.	Minn. R. 7011.1220, subp.2; Minn. R. 7007.0800, subp. 2
Facility Operation: Properly maintain and operate air pollution control equipment at all times when the waste combustor is in operation and combusting RDF. Operation of the dry lime injection systems (CE 007 and CE 008) is not required when the standards of Minn. R. 7011.0510 apply. By-pass of the particulate matter pollution control equipment (CE 005 and CE 006) is allowed only during periods of warm-up while combusting natural gas.	Minn. R. 7007.0800, subp. 16(J) Minn. R. 7011.1240, subp. 7
QA Plan required: Develop and implement a written quality assurance plan which covers each CEMS and COMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain the written procedures listed in Minn. R. 7017.1210, subp. 1.	Minn. R. 7017.1210 Minn. R. 7017.1170
AVERAGING PERIODS	hdr
Averaging Periods: For emission limits or operational limits which are monitored continuously the following averaging periods shall be used: A) for particulate matter control device inlet temperature monitoring, four-hour arithmetic block averages calculated from four consecutive one-hour arithmetic averages. B) for unit load, a four-hour arithmetic block average, the four-hour arithmetic block averages shall be calculated from four continuous one-hour arithmetic averages. C) For opacity, a 6-minute average calculated using 36 or more data points equally spaced over a 6-minute period.	Minn. R. 7011.1260, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

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<p>Averaging Periods (continued)</p> <p>D) for SO₂, a geometric average of the 1-hour arithmetic average emission concentration during each 24-hour daily period measured from midnight to midnight.</p> <p>E) for NO_x, an arithmetic average of the 1-hour arithmetic average emission rates concentration during each 24-hour daily period measured from midnight to midnight.</p> <p>F) for carbon monoxide, an arithmetic average of the 1-hour arithmetic average emission rates concentration during each 24-hour daily period measured from midnight to midnight.</p> <p>At least 4 data points equally spaced in time shall be used to calculate each 1-hour arithmetic average. Each 1-hour average shall be corrected to 7 % O₂ on an hourly basis using the one-hour arithmetic average of the O₂ or CO₂ continuous emissions monitoring system;</p>	Minn. R. 7011.1260, subp. 4 (continued)
OPERATING TRAINING & CERTIFICATION	hdr
<p>Develop and maintain the Operating Manual in accordance with Minn. R. 7011.1275, subp. 3, items A through O; Update the manual following each performance test to include operational changes resulting from emissions performance testing results. Include the revision dates within the Operating Manual; Store the Operating Manual in a location easily accessed by staff.</p>	Minn. R. 7011.1275, subp. 3;
<p>Training Program: Implement a training program, based on the Operating Manual, designed to maintain compliance with this permit and Minn. Rules. Individual training must be specific to the position held. The permittee will: Implement the required training; Document the nature and length of training for each individual; Report the names of those who have been trained in the Quarterly Report following training.</p>	Minn. R. 7011.1275; Minn. R. 7007.0800, subp. 2
<p>Training Program: Persons with job-related activities affecting air emission must: Initially review the operating manual prior to assumption of any job-related activities affecting air emissions, and; Annually review the operating manual.</p> <p>Persons with newly-assigned job-related activities affecting air emission must review the portions of the operating manual relevant to the newly-assigned position before assumption of the new job-related activities.</p>	Minn. R. 7011.1275, subp. 1
<p>Training Program: Persons without waste combustor or boiler operation experience must work under the direct supervision of a certified operator or a certified operator's designee for 40 hours before assuming job-related activities affecting air emissions.</p>	Minn. R. 7011.1275, subp. 1(C)
<p>Training Program: Waste combustor personnel who have responsibilities which affect the operation of the waste combustor must be trained in the operation of the facility. These personnel include, but are not limited to, chief facility operators, shift supervisors, operator supervisors, control room personnel, ash handlers, maintenance personnel, and load handlers. The permittee will: Identify all people described above who must be trained, and include a separate page for each of these people in the Operating Record; Report the names of those who have been trained and the type of training received in the Annual Report following training as required under Minn. R. 7011.1285, subp. 2.</p>	Minn. R. 7011.1275, subp. 1; Minn. R. 7011.1275, subp. 2; Minn. R. 7011.1275, subp. 4
<p>Certified Operator: The permittee shall:</p> <p>1) Maintain at the facility for 5 years a record of the names of all certified personnel. This record shall contain the exam dates, the content of the exam, the full name of the certified individual, the examiner's signature and the certification statement in Minn. R. 7011.1284, subp. 3.</p> <p>2) Maintain at the facility for 5 years a record of the names of all personnel who have obtained provisional and/or full certification by ASME.</p> <p>The permittee shall allow the commissioner to review all records related to the certification of operators including the facility's program for examination and certification of operators, the record required in Minn. R. 7011.1284, subp. 3, and the content and results of an individual's exam.</p>	Minn. R. 7011.1284, subp. 3; Minn. R. 7011.1284, subp. 3a
<p>Permittee shall allow the commissioner to review all records related to the certification of operators including the facility's program for examination and certification of operators, the record required in Minn. R. 7011.1284, subp. 3, the content of the examinations and the results on an individual's examination.</p>	Minn. R. 7011.1284, subp. 4
<p>Presence of certified operator. The person described in Minn. R. 7011.1240, subp. 1 shall be present at the waste combustor facility at all times when solid waste is being combusted. The certified operator shall meet the minimum requirements of Minn. R. 7011.1280, subp. 3(B) and 7011.1281.</p>	Minn. R. 7011.1240, subp. 1;
MONITORING REQUIREMENTS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing

Permit Number: 04900005 - 002

Continuous Monitoring: Permittee shall install, calibrate, maintain and operate, in accordance with Minn. R. 7011.1260, subp. 5, monitors that continuously read and record: a) unit load level as determined through steam flow measurement b) oxygen concentrations at each location where CO, SO ₂ and NO _x emissions are monitored. c) temperatures of the flue gas at the inlet of each particulate matter control device. d) flue gas opacity. e) grate speed	Minn. R. 7011.1260, subp. 2; Minn. R. 7011.1260, subp. 3; Minn. R. 7011.1272, subp. 3
Installation Notification: due 60 days before installing the COMS/CEMS. Install the CEMS according to the procedures in 40 CFR Appendix B.	Minn. R. 7017.1040, subp. 1;
CEMS QA/QC: The owner or operator of an affected facility shall operate, calibrate, and maintain each CEMS according to the QA/QC procedures in 40 CFR pt. 60, Appendix F, section 3, as amended.	Minn. R. 7011.1260, subp. 5(G)
COMS Monitoring Data: Owners or operators of all COMS shall reduce all data to 6 minute averages. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the 6 minute averaging period.	Minn. R. 7017.1200, subp. 1, 2, & 3;
CEMS/COMS Continuous Operation: CEMS/COMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit startup, shutdown, or malfunction. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS/COMS must not be bypassed except in emergencies where failure to bypass the CEMS/COMS would endanger human health, safety, or plant equipment.	Minn. R. 7017.1090, subp. 1
Monitoring data shall be obtained for at least 75 percent of the hours per day for 90 percent of the days per calendar quarter that the combustor is operating and combusting RDF.	Minn. R. 7011.1260, subp. 5(B)
CEMS/COMS Certification Test: due 90 days after first Excess Emissions Report. This requirement applies to any CEMS/COMS which has not previously been certified.	Minn. R. 7017.1060, subp. 1 and 2
CEMS/COMS Certification Test Plan: due 30 days before CEMS/COMS certification test.	Minn. R. 7017.1060, subp. 1 and 2
CEMS/COMS Certification Pretest Meeting: due 7 days before CEMS/COMS certification test.	Minn. R. 7017.1060, subp. 3
CEMS/COMS Certification Test Report: due 45 days after CEMS/COMS certification test.	Minn. R. 7017.1080, subp. 1, 2, and 4
CEMS/COMS Certification Test Report - Microfiche Copy: due 105 days after CEMS/COMS Certification Test. Permittee may submit report in CDROM format in lieu of microfiche.	Minn. R. 7017.1080, subp. 3
COMS Daily Calibration Drift (CD) Check: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) opacity at least once daily from each COMS according to the procedures listed in 40 CFR 60.13.	Minn. R. 7011.1260, subp. 5(E); Minn. R. 7017.1210, subp. 2
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily according to the procedures of 40 CFR 60.13. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS.	Minn. R. 7011.1260, subp. 5(E); Minn. R. 7017.1170, subp. 3
COMS Calibration Error Audit: due before end of each half-year starting 04/29/2002. Conduct audits at least 3 months apart but no greater than 8 months apart. Follow the procedures of 40 CFR 60, Appendix B, Performance Specification 1.	Minn. R. 7017.1210, subp. 3; Minn. R. 7007.0800, subp. 2
COMS Calibration Error Audit Results Summary: due 30 days after end of each calendar quarter following COMS Calibration Error Audit.	Minn. R. 7017.1220
CEMS Cylinder Gas Audit (CGA): due before end of each calendar quarter starting 04/29/2002 except for quarters in which a RATA was performed. This requirement applies to each CEMS as well as each diluent monitor.	Minn. R. 7011.1260, subp. 5(G); Minn. R. 7007.0800, subp. 2
Cylinder Gas Audit (CGA) Results Summary: due 30 days after end of each calendar quarter following Cylinder Gas Audit	Minn. R. 7011.1285, subp. 3(G); Minn. R. 7007.0800, subp. 2; Minn. R. 7017.1180, subp. 1.
CEMS Relative Accuracy Test Audit (RATA): due before end of each year starting 04/29/2002. Follow the procedure in 40 CFR pt. 60, Appendix F. The RATA shall be conducted during the calendar quarter in which a cylinder gas audit (CGA) is not performed. This requirement applies to each CEMS individually.	Minn. R. 7011.1260, subp. 5(G); Minn. R. 7007.0800, subp. 2
Relative Accuracy Test Audit (RATA) Notification: Due 30 days before CEMS Relative Accuracy Test Audit (RATA)	Minn. R. 7007.0800, subp. 2; Minn. R. 7017.1180, subp. 2.
Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of the calendar quarter in which the Audit was performed	Minn. R. 7011.1285, subp. 3(G); Minn. R. 7007.0800, subp. 2; Minn. R. 7017.1180, subp. 3.

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing

Permit Number: 04900005 - 002

Recordkeeping: Maintain a file of all of the following CEMS and COMS information in a form suitable for inspection, on site, for a period of 5 years from the date of each record: each one-hour emission average recorded by the CEMS; each six-minute opacity average recorded by the COMS; monitor certification test reports; EERs; RATAs; CGAs; calibration error audit reports; reports of daily drift checks; log of adjustments made to the CEMS/COMS and maintenance performed on each CEMS/COMS; and an up-to-date monitor QA/QC plan.	Minn. R. 7017.1130
Recordkeeping: Permittee will maintain a record of continuously measured parameters as specified in Minn. R. 7011.1260, subp. 6.	Minn. R. 7011.1260, subp. 6; Minn. R. 7007.0800, subp. 2
Steam flow measurement method. The method contained in ASME Power Test Codes: Test Codes for Steam Generating Units, PTC 4.1 (1972), section 4, shall be used for calculating the steam flow required under Minn. R. 7011.1260, subpart 3, item A, subitem (2). The recommendations of Instruments and Apparatus: Measurement of Quantity of Materials, Interim Supplement 19.5 (1971), chapter 4, shall be followed for design, construction, installation, calibration, and use of nozzles and orifices, except that measurement devices such as flow nozzles and orifices are not required to be recalibrated after they are installed. All signal conversion elements associated with steam flow measurements must be calibrated according to the manufacturer's instructions before each PCDD/PCDF test, and at least once per year. This annual calibration shall be recorded in the daily operating record as described in Minn. R. 7011.1285, subpart 2.	Minn. R. 7011.1265, subp. 4
Alternative continuous measuring methods in place of steam flow may be installed and operated, provided that the method continuously measures the waste combustor unit load, is equivalent to results obtained when using the method in Minn. R. 7011.1265, subp. 4, and the use of the method is approved by the commissioner.	Minn. R. 7011.1265, subp. 4a
TESTING REQUIREMENTS	hdr
Permittee shall use the performance test methods and procedures specified in Minn. R. 7017.2001 to 7017.2060 except as modified in Minn. R. 7011.1265. Not operating a sorbent injection system for the sole purpose of testing in order to demonstrate compliance with the percent reduction standards for hydrogen chloride is not a modification under Minn. R. 7007.0100, subpart 14.	Minn. R. 7011.1265, subp. 1
The Permittee shall determine the maximum demonstrated capacity of each unit during the initial performance test for PCDD/PCDF and each subsequent performance test during which compliance with the PCDD/PCDF emissions limit in Minn. R. 7011.1225 is achieved.	Minn. R. 7011.1265, subp. 7
Operation during performance testing. Permittee shall report to the commissioner the operating conditions including operating parameters of the air pollution control equipment, flue gas temperatures and air flow rates.	Minn. R. 7011.1265, subp. 6
Particulate matter control device temperature. Permittee shall determine and record the four-hour arithmetic average gas stream temperature as measured at the inlet to each particulate matter control device during the initial and each subsequent performance test for PCDD/PCDF demonstrating compliance with the PCDD/PCDF emission limit in Minn. R. 7011.1225.	Minn. R. 7011.1265, subp. 8
Exceedances of emission limits. If accurate and valid data results of a performance test demonstrate an exceedance of a standard of performance as described in Minn. R. 7011.1225 or in this air emission permit after normal start-up, Permittee shall undertake the actions in items A to D. A. The exceedance shall be reported to the commissioner as soon as reasonably possible giving consideration to matters of plant or worker safety, or access to communications and the applicable reporting provisions of Minn. R. 7007.0800, subpart 6, shall be met. B. Immediately undertake appropriate repairs or modifications to return the waste combustor to compliance as soon as possible.	Minn. Stat. 165.85, subd 3; and Minn. R. 7011.1265, subp. 11
Exceedances of emission limits (continued): C. Conduct additional performance test(s) or shut the waste combustor down. If the waste combustor cannot demonstrate compliance within 60 days of the report of initial exceedance, the waste combustor shall be shut down on the 61st day after the report of the exceedance. The performance test shall be conducted and the test report received within those 60 days.	Minn. Stat. 165.85, subd 3; and Minn. R. 7011.1265, subp. 11 (continued)

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing

Permit Number: 04900005 - 002

<p>Exceedances of emission limits (continued):</p> <p>D. If the permittee cannot demonstrate compliance within 60 days of the report of the initial exceedance, the permittee may restart the waste combustor for the purposes of compliance testing, provided that at least a 10-day notification has been provided to the commissioner. The permittee is allowed to operate the waste combustor until the completion of the test, after which the waste combustor must be shut down. The waste combustor may be restarted only after the permittee receives notice from the commissioner that it has achieved compliance with the emissions standards or restarts for the purpose and duration of additional testing after further repair or operational changes.</p> <p>This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.</p>	<p>Minn. Stat. 165.85, subd 3; and Minn. R. 7011.1265, subp. 11 (continued)</p>
<p>Performance Test: due before end of each calendar year following Initial Performance Test to measure front-half PM, Total PM, Total PCDD/PCDF, Cd, HCl, Hg, and Pb. A year is defined as 12 months. The tests shall be conducted at an interval not to exceed 12 months between test dates.</p> <p>For additional applicable performance test requirements, see 'General Performance Test Requirements' in Table A, Subject Item "Total Facility".</p> <p>If Permittee meets the criteria for decreased PCDD/PCDF testing, per Minn. R. 7011.1270, the Permittee shall submit a notification stating that testing will not be conducted that year. The basis for not testing must be stated. In addition, the notification shall specify the Total PCDD/PCDF results from the previous test. When the Permittee provides notification that a test will not be conducted because criteria are met for less frequent testing, the test plan, pre-test meeting, test report, and microfiche (or CDROM) copy of the test report requirements are waived for that yearly test</p>	<p>Minn. R. 7011.1270); Minn. R. 7017.2030, subp. 1 Minn. R. 7007.0800, subp. 2</p>
<p>Permittee shall conduct PCDD/PCDF performance tests as described below:</p> <p>If all PCDD/PCDF performance tests for all units for a two-year period indicate that PCDD/PCDF emissions are less than or equal to 15 ng/dscm corrected to seven percent oxygen from each unit, then Permittee may choose to test one unit for PCDD/PCDF once annually thereafter, but not more than 12 months following the previous performance test. Permittee may continue to test a different unit for PCDD/PCDF each year, in sequence (e.g. unit 1, unit 2, etc.). If any annual performance test demonstrates a PCDD/PCDF concentration greater than 15 ng/dscm corrected to seven percent oxygen, performance tests thereafter shall be conducted annually on all units and until all annual performance tests for all units for a two-year period indicate a PCDD/PCDF emission concentration less than or equal to 15 ng/dscm.</p>	<p>Minn. R. 7011.1270</p>
<p>Hg test frequency: The Permittee may choose to conduct Hg emissions testing every three months or every 12 months. If a test shows that an emission limit for mercury is exceeded, the commissioner shall require testing every three months thereafter until compliance with the standard is demonstrated.</p>	<p>Minn. R. 7011.1270 Minn. Stat. 116.85, subd. 3</p>
<p>RECORDKEEPING</p>	<p>hdr</p>
<p>Recordkeeping: record in the daily operating record the four-hour arithmetic average gas stream temperature as measured at the baghouse inlet during the most recent PCDD/PCDF performance test demonstrating compliance with the PCDD/PCDF emission limit in part 7011.1225.</p>	<p>Minn. R. 7011.1265, subp. 8; Minn. R. 7011.1240, subp. 2</p>
<p>Permittee shall maintain on site for five years after the report is generated, a paper copy of each quarterly report, initial compliance report, and performance test report required under Minn. R. 7011.1285, subparts 3, 5, and 6 respectively.</p>	<p>Minn. R. 7011.1285, subp. 1</p>
<p>The permittee shall maintain a file of all of the following CEMS or COMS information at the emission facility in a form suitable for inspection for at least five years from the date of each record:</p> <ul style="list-style-type: none"> A. each one-hour emission average recorded by the CEMS; B. each six-minute opacity average recorded by the COMS; C. monitor certification test reports; D. excess emissions reports; E. cylinder gas audit reports; F. calibration error audit reports; G. relative accuracy test audits; H. linearity check reports; I. results of daily calibration drift checks; J. log of adjustments made to the CEMS or COMS and maintenance performed on the CEMS or COMS; and K. all other monitoring system information required by an applicable compliance document. <p>The permittee shall also keep an updated copy of the facility's CEMS or COMS quality assurance plan on site.</p>	<p>Minn. R. 7017.1130</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing

Permit Number: 04900005 - 002

<p>Daily Operating Record: The Permittee shall maintain on-site daily records for the operation of the waste combustor. Daily records include such things as the operator log book, operator daily log sheets, trend records, CEMS records, and the daily operating report. The record shall contain:</p> <p>A. the calendar date;</p> <p>B. the hours of operation;</p> <p>B1. the time when RDF begins feeding and the unit load of the steam turbine at the time;</p> <p>B2. the time the RDF feed to the combustion chamber ceases;</p> <p>B3. the average grate speed during a fuel switch from RDF to another permitted fuel and vice versa.</p> <p>B4. the time at which the applicable emissions limits switch from Minn. R. 7011.1227, 7011.1228, and 7011.1240, subps. 2 and 5 to 7011.0510 due to a fuel switch from RDF to another permitted fuels and vice versa.</p>	<p>Minn. R. 7011.1285, subp. 2</p> <p>Minn. R. 7007.0800, subp. 2</p>
<p>Daily Operating Record (Continued)</p> <p>C. the weight of RDF combusted;</p> <p>C1. the number of gallons of waste oil burned;</p> <p>C2. the hour each quantity of waste oil was burned;</p> <p>C3. The source of the waste oil burned;</p> <p>D. the weight of RDF requiring disposal at a solid waste land disposal facility, including separated noncombustibles, excess RDF, and ash;</p> <p>E. the amount and description of industrial solid waste received each day, the generator's name, and the method of handling;</p> <p>F. the measurements and determination of emissions averages as required in part 7011.1260, subpart 6;</p> <p>G. results of performance tests conducted on waste combustor units as required in part 7011.1270;</p>	<p>Minn. R. 7011.1285, subp. 2 ;</p> <p>Minn. R. 7007.0800, subp. 2 (Continued)</p>
<p>Daily Operating Record (continued)</p> <p>H. instances of dumpstack use;</p> <p>H1. the time when PM control equipment by-pass begins;</p> <p>H2. the time when PM control bypass ceases;</p> <p>I. the names of persons who have completed initial review or subsequent annual review of the operating manual;</p> <p>J. the reasons for exceeding any of the average emission rates, percent reductions, or operating parameters specified under Minn. R. 7011.1260, subp. 6, item C, or the opacity limit and a description of corrective actions taken;</p> <p>K. reasons for not obtaining the minimum number of hours of sulfur dioxide or nitrogen oxides emissions or operational data (carbon monoxide emissions, steam flow, particulate matter control device temperature) and a description of corrective actions taken</p>	<p>Minn. R. 7011.1285, subp. 2</p> <p>Minn. R. 7007.0800, subp. 2 (Continued)</p>
<p>Daily Operating Record (continued)</p> <p>L. the date of the calibration of all signal conversion elements associated with steam flow monitoring as required in Minn. R. 7011.1265, subp. 4.</p> <p>M. if the permittee uses an additive to control Hg or PCDD/PCDF, the reasons for not maintaining the additive system operating parameter as determined in Minn. R. 7011.1272, subp. 2 and the corrective actions taken; and</p> <p>N. if the permittee uses an additive to control Hg or PCDD/PCDF, the reasons for not maintaining the additive mass feed rates as determined in Minn. R. 7011.1272, subp. 1 and the corrective actions taken.</p>	<p>Minn. R. 7011.1285, subp. 2</p> <p>Minn. R. 7007.0800, subp. 2 (Continued)</p>
<p>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.</p>	<p>Minn. R. 7007.0800, subp. 2</p>
<p>Archiving: Retain all continuously measured emission records for a minimum of five years. Regarding boiler load level monitoring, permanently retain current records of design, construction, installation, calibration, and use of nozzles and orifices. The permittee will store the above records in a reviewable format at the facility site and make them available upon request.</p>	<p>Minn. R. 7007.0800, subp. 2</p>
<p>Shutdown or Breakdown Reporting Requirements. Permittee shall meet the requirements of part 7019.1000 and Minnesota Statutes, section 116.85. Notification to the commissioner for any shutdowns/breakdown is not required if RDF feed is planned to be taken off-line in conjunction with a shutdown.</p>	<p>Minn. R. 7011.1240, subp. 8</p>
<p>Recordkeeping: Permittee shall continuously read and record the temperatures of the flue gas at the inlet of the each particulate control device.</p>	<p>Minn. R. 7011.1260, subp. 2</p>
<p>REPORTING</p>	<p>hdr</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing

Permit Number: 04900005 - 002

Reporting of Exceedances of Continuously Monitored Emissions: If accurate and valid data results collected from the sulfur dioxide, carbon monoxide and/or nitrogen oxide monitors exceed emission limits, the following procedures shall be followed. (1) Exceedance shall be reported to the commissioner as soon as reasonably possible. (2) Appropriate repairs or modifications to return the waste combustor to compliance must be commenced within 72 hours. If compliance cannot be achieved within 72 hours, then the waste combustor shall be shut down. If modifications to return the waste combustor to compliance require the amendment of this permit, the waste combustor shall shut down within 72 hours of the exceedance.	Minn. R. 7011.1260, subp. 7
Reporting of exceedances of continuously monitored emissions (continued): (3) When repairs or modifications have been completed, The permittee shall demonstrate to the commissioner that the waste combustor is in compliance. The waste combustor may be started up after the permittee has notified the commissioner in writing of the date the permittee plans to start up the waste combustor and the date that performance testing is schedule. Notification shall be given at least 10 days in advance of the compliance test date.	Minn. R. 7011.1260, subp. 7 (continued)
Quarterly Reports: The report shall contain the following items: A. calendar date; B. a graphic or tabular presentation of the sulfur dioxide, nitrogen oxide, and carbon monoxide emissions, the maximum waste combustor unit load level and particulate matter control device temperatures as recorded by Minn. R. 7011.1260, subp. 6, item C, and the daily maximum opacity readings as recorded by Minn. R. 7011.1260, subp. 6, item B, subitem (1). The graphs shall be prepared as follows: (1) the graph shall represent one operating parameter or pollutant; (2) the applicable limit of the parameter or pollutant shall be indicated on the graph; and (3) data shall be expressed in the same units as the applicable operating parameter or emissions limit; C. instances of dumpstack use;	Minn. R. 7011.1285, subp. 3 (Continued)
Quarterly Reports (Continued): D. the identification of operating days when any of the average emission concentrations, percent reductions, operating parameters specified under Minn. R. 7011.1260, subp 6(C), Minn. R. 7011.1272, subp. 2 or the opacity level exceeded the applicable limits. The report shall include the emission levels recorded during the exceedance, reasons for such exceedances as well as a description of corrective actions taken; E. the percent of the operating time for the quarter that the opacity CEMS was operating and collecting valid data; F. the identification of operating days for which the minimum number of hours that emission concentrations, percent reductions, operating parameters specified under Minn. R. 7011.1260, subp. 6(C), Minn. R. 7011.1272, subp. 2 or the opacity level have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;	Minn. R. 7011.1285, subp. 3 (Continued)
Quarterly Reports (Continued) G. the results of daily sulfur dioxide, nitrogen oxides, and carbon monoxide CEMS drift tests and accuracy assessments as required in Minn. R. 7011.1260, subp. 5. H. the information required in Minn. R. 7011.1285, subp 2(C), (D), and (E), summarized to reflect quarterly totals; I. a compliance certification as required in Minn. R. 7007.0800, subp 6(C); and J. if an additive is used to comply with the mercury or PCDD/PCDF emission limits, the total additive used during the calendar quarter, as specified in Minn. R. 7011.1272, subp. 3(B), with supporting calculations.	Minn. R. 7011.1285, subp. 3 (Continued)

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing

Permit Number: 04900005 - 002

Subject Item: EU 001 Boiler 1

Associated Items: GP 001 Waste Combustors

MR 001 CO (stack)

MR 002 NOx (stack)

MR 003 SO2 (stack)

MR 004 O2 (stack)

MR 005 SO2 (scrubber inlet)

MR 006 O2 (scrubber inlet)

MR 015 Temperature (bag house inlet)

MR 016 Steam Flow

MR 020 Opacity (stack)

SV 001 Boiler 1

What to do	Why to do it
OPERATIONAL LIMITS	hdr
<p>Steam Flow: less than or equal to 125,760 lbs/hour using 4-hour Block Average as determined during the May 10-13, 2004 PCDD/PCDF performance test. This represents the Maximum Demonstrated Capacity which cannot be exceeded without conducting a performance test to establish a new maximum demonstrated capacity under part 7011.1265, which demonstrates compliance with the emission limitations of 7011.1225 except during the annual PCDD/PCDF performance and the two weeks prior to this test as limited below.</p> <p>During the annual PCDD/PCDF performance test and the two weeks prior to this test, no waste combustor load limitations are applicable.</p>	<p>Minn. R. 7011.1240, subp. 5; Minn. R. 7017.2025, subp. 3</p>
<p>The commissioner shall waive the waste combustor load limits for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions, provided a written notification is submitted to the commissioner 30 days prior to undertaking any of the activities identified above, with the following information:</p> <ol style="list-style-type: none"> 1) a description of the proposed project, and the outcome the project is designed to evaluate; 2) how the project conforms with the activities described above for which the waste combustor load limit can be waived; 3) the length of time the project will take to complete. <p>The commissioner shall waive the maximum demonstrated capacity limits provided that the project conforms with the activities described above and the project can be accomplished within 14 days.</p>	<p>Minn. R. 7011.1240, subp. 5 (continued)</p>
<p>Temperature: less than or equal to 327 degrees F using 4-hour Block Average (as measured during the May 10-13, 2004 PCDD/PCDF performance test) as measured at the inlet to the particulate matter control device. This includes the 30 degrees F allowance above the average tested value.</p> <p>During the annual PCDD/PCDF performance test and the two weeks prior to this test, no particulate matter control device inlet flue gas temperature limit applies.</p>	<p>Minn. R. 7011.1240, subp. 2; Minn. R. 7017.2025 subp. 3</p>
<p>The commissioner shall waive the particulate matter control device inlet flue gas temperature limit for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions, provided a written notification is submitted to the commissioner 30 days prior to undertaking any of the activities identified above, with the following information:</p>	<p>Minn. R. 7011.1240, subp. 2 (continued)</p>
<ol style="list-style-type: none"> 1) a description of the proposed project, and the outcome the project is designed to evaluate; 2) how the project conforms with the activities described above for which the particulate matter control device inlet flue gas temperature limit can be waived; 3) the length of time the project will take to complete. <p>The commissioner shall waive the flue gas inlet temperature limits provided that the project conforms with the activities described above and the project can be accomplished within 14 days.</p>	<p>Minn. R. 7011.1240, subp. 2 (continued)</p>

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing

Permit Number: 04900005 - 002

Subject Item: EU 002 Boiler 2

Associated Items: GP 001 Waste Combustors

MR 008 CO (stack)

MR 009 NOx (stack)

MR 010 SO2 (stack)

MR 011 O2 (stack)

MR 012 SO2 (scrubber inlet)

MR 013 O2 (scrubber inlet)

MR 014 Opacity

MR 017 Temperature (bag house inlet)

MR 018 Steam Flow

SV 002 Boiler 2

What to do	Why to do it
OPERATIONAL LIMITS	hdr
<p>Steam Flow: greater than or equal to 140,160 lbs/hour using 4-hour Block Average as determined during the May 10-13, 2004 PCDD/PCDF performance test. This represents the Maximum Demonstrated Capacity which cannot be exceeded without conducting a performance test to establish a new maximum demonstrated capacity under part 7011.1265, which demonstrates compliance with the emission limitations of 7011.1225 except during the annual PCDD/PCDF performance and the two weeks prior to this test as limited below.</p> <p>During the annual PCDD/PCDF performance test and the two weeks prior to this test, no waste combustor load limitations are applicable.</p>	Minn. R. 7011.1240, subp. 5
<p>The commissioner shall waive the waste combustor load limits for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions, provided a written notification is submitted to the commissioner 30 days prior to undertaking any of the activities identified above, with the following information:</p> <ol style="list-style-type: none"> 1) a description of the proposed project, and the outcome the project is designed to evaluate; 2) how the project conforms with the activities described above for which the waste combustor load limit can be waived; 3) the length of time the project will take to complete. <p>The commissioner shall waive the maximum demonstrated capacity limits provided that the project conforms with the activities described above and the project can be accomplished within 14 days.</p>	Minn. R. 7011.1240, subp. 5 (continued)
<p>Temperature: less than or equal to 313 degrees F (as measured during the May 10-13, 2004 PCDD/PCDF performance test) as measured at the inlet to the particulate matter control device. This includes the 30 degrees F allowance above the average tested value.</p> <p>During the annual PCDD/PCDF performance test and the two weeks prior to this test, no particulate matter control device inlet flue gas temperature limit applies.</p>	Minn. R. 7011.1240, subp. 2
<p>The commissioner shall waive the particulate matter control device inlet flue gas temperature limit for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions, provided a written notification is submitted to the commissioner 30 days prior to undertaking any of the activities identified above, with the following information:</p>	Minn. R. 7011.1240, subp. 2 (continued)
<ol style="list-style-type: none"> 1) a description of the proposed project, and the outcome the project is designed to evaluate; 2) how the project conforms with the activities described above for which the particulate matter control device inlet flue gas temperature limit can be waived; 3) the length of time the project will take to complete. <p>The commissioner shall waive the flue gas inlet temperature limits provided that the project conforms with the activities described above and the project can be accomplished within 14 days.</p>	Minn. R. 7011.1240, subp. 2 (continued)

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing

Permit Number: 04900005 - 002

Subject Item: EU 005 Lime Storage Silo**Associated Items:** CE 009 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 005 Lime Silo Vent

What to do	Why to do it
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Perform Visible Emissions Check and Complete Check List as set forth in Appendix I of the Additional Appendix Material.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing

Permit Number: 04900005 - 002

Subject Item: EU 006 Lime Storage Silo**Associated Items:** CE 010 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 006 Lime Silo Vent

What to do	Why to do it
Opacity: less than or equal to 20 percent	Minn. R. 7011.0715, subp. 1(B)
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.	Minn. R. 7011.0715, subp. 1(A)
Perform Visible Emissions Check and Complete Check List as set forth in Appendix I of the Additional Appendix Material.	Minn. R. 7007.0800, subp. 2

TABLE B: SUBMITTALS

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing
Permit Number: 04900005 - 002

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

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing

Permit Number: 04900005 - 002

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before 06/01/2009	Total Facility
Computer Dispersion Modeling Information	due 1096 days after 06/01/2004 . Submit modeling data as specified in MPCA guidance for Modeling Information Requests (for pollutant). This modeling information is for data collection purposes, no modeling analysis is required at this time. This is a state only requirement and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Total Facility
Fugitive Control Plan	due 60 days after 06/01/2004 for review and approval by the Commissioner. The plan shall identify all fugitive emission sources, primary and contingent control measures, and record keeping. The Permittee shall follow the actions and record keeping specified in the control plan. The plan may be amended by the Permittee with the Commissioner's approval. If the Commissioner determines the permittee is out of compliance with Minn. R. 7011.0150 or the fugitive emission control plan, then the permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors.	Total Facility
Performance Test Notification (written)	due 30 days before Performance Test	GP001
Performance Test Report - Microfiche Copy	due 105 days after Performance Test or 74 days after receipt of Performance Test Report by Permittee for each Performance Test conducted.	GP001
Performance Test Report	due 45 days after Performance Test or 14 days after receipt of the Performance Test Report by the permittee for each Performance Test conducted, whichever is later. Each report must bear the permittee's date stamp receipt.	GP001

TABLE B: RECURRENT SUBMITTALS

08/11/05

Facility Name: NSP dba Xcel Energy - Red Wing

Permit Number: 04900005 - 002

What to send	When to send	Portion of Facility Affected
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter starting 06/01/2004 (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of CEMS/COMS bypass and all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions.	GP001
Quarterly Report	due 30 days after end of each calendar quarter starting 06/01/2004	GP001
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 06/01/2004 . The first semiannual report submitted by the Permittee shall cover the calendar half-year in which the permit is issued. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 31 days after end of each calendar year starting 06/01/2004 (for the previous calendar year). To be submitted 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
Emissions Inventory Report	due 91 days after end of each calendar year starting 06/01/2004 (April 1). To be submitted on a form approved by the Commissioner.	Total Facility

APPENDIX MATERIAL

Facility Name: NSP dba Xcel Energy - Red Wing

Permit Number: 04900005-002

APPENDIX I

Visible Emissions Checklist(s) Requirements

Emission Units and Stack/Vents:

Lime storage silos (EU 005 and EU 006)

Visible Emissions Checklist(s): The Permittee shall check for visible emissions while loading silo during daylight hours at least once each month. If visible emissions are observed, the Permittee shall determine the cause and take corrective actions as soon as possible. The results of the check shall be recorded on a checklist containing the following:

- 1) Printed name of observer.
- 2) Signature of observer.
- 3) Date and time of observation.
- 4) Indication of process and control equipment performance, either "requires attention," or "does not require attention." This determination is based upon an observed change in visible emission characteristics from that observed when this source and its pollution control equipment are properly operated and maintained. A change in visible emission characteristics will be indicative of "requires attention."
- 5) Description of investigation and corrective actions completed for each "requires attention" observation.
- 6) Weather conditions (temperature, cloud cover, wind, precipitation).
- 7) Indication if plume were limited by visible moisture in the plume.
- 8) Emission unit (EU) and Stack/Vent (SV) ID number(s).
- 9) Short description of emission unit.

APPENDIX II

RDF Receiving Area Housekeeping Plan

Introduction

During the course of normal activities, RDF can become airborne due to the design of the Receiving Area Building (one side open for semi-trailers). It is necessary to implement the following housekeeping procedures to minimize particulate emissions from open doors.

Precautions

Fugitive RDF should be collected and placed in the Receiving Area, either on the Walking Floor Conveyor or in the Storage Building.

Housekeeping

To minimize the opportunity for RDF to become airborne

1. The doors to the Receiving Area Storage Building shall be kept closed at all times when not loading RDF on the walking floor. Keep main access doors to the Storage Building closed when not unloading trucks in the Storage Building.
2. Truck drivers delivering RDF to the Plant shall sweep the backs of the trailers and doors free of RDF and into the walking floor before leaving the truck bays.
3. The truck unloading side of the Receiving Area Building will be cleaned a minimum of 3 times/week with regards to operation on RDF fuel.
4. Weekly inspections of the site will be performed during non-snow covered times of the year to monitor the site for fugitive RDF.
5. The Transfer Conveyor gallery will be cleaned on at least a weekly basis.
6. Fugitive RDF will be picked up and returned to the Receiving Area building on a regular basis during non-snow covered times of the year.

Traffic Control

Any equipment utilized in the Receiving Area building shall be confined to the building. If necessary to take equipment from the facility, vehicles shall be inspected for loose RDF and cleaned before leaving the area.

APPENDIX III

Insignificant Activities

Insignificant Activities Applicable Requirements

RDF Conveyor

Minn. R	Requirement
7011.0715, subp. 1(A)	Particulate Matter: less than or equal to 0.3 gr./dscf. of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.
7011.0715, subp. 1(B)	Opacity: less than or equal to 20%.

Auxiliary Boiler

Minn. R	Requirement
7011.0515, subp. 1	Total particulate matter: less than or equal to 0.4 lb./MMBtu heat input.
7011.0515, subp. 2	Opacity: less than or equal to 20% except for one six-minute period per hour of not more than 60% opacity. An exceedance of this opacity standard occurs whenever any one-hour period contains two or more six-minute periods during which the average opacity exceeds 20% or whenever any one-hour period contains one or more six-minute periods during which the average opacity exceeds 60%.

RDF Unloading

Minn. R	Requirement
7011.0715, subp. 1(A)	Particulate Matter: less than or equal to 0.3 gr./dscf. of exhaust gas unless required to further reduce emissions to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011. 0735.
7011.0715, subp. 1(B)	Opacity: less than or equal to 20%.
7007.0800, subp. 2	Comply with RDF Receiving Housekeeping Plan in Appendix II of the Additional Appendix Material.

Insignificant Activities Without Applicable Requirements

The following activities/emission units are insignificant activities for which there are no applicable requirements:

- Fuel oil storage tanks.
- Space heaters.
- Welding equipment.
- Road and parking lot fugitive emissions.
- Analysis laboratory.

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 04900005-002

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 preliminary determination to issue the permit.

1. General Information

1.1. Applicant and Stationary Source Location:

Applicant/Address	Stationary Source/Address (SIC Code: 4911)
Northern States Power Company d/b/a Xcel Energy 414 Nicollet Mall Minneapolis, MN 55401-1993	NSP- Xcel Energy – Red Wing 801 5th Street East Red Wing Goodhue County
Contact: Ms. Shannon Forss Phone: (612) 330 5956	

1.2. Facility Description

The Red Wing Plant is an electric power generating station located along the Mississippi River in Red Wing Minnesota. The Red Wing plant is rated at 25 Megawatts (MW) and has two boilers that primarily burn Refuse Derived Fuel (RDF). The RDF burned at this facility is processed under contract with the Elk River Resource Recover Facility in Elk River, Minnesota; and the Ramsey/Washington Resource Recovery Facility in Newport, Minnesota.

Energy is produced through combustion of RDF in two traveling grate boilers. The units are identified in the permit as emissions units 1 and 2 (EU 001 and EU 002). The units are 180 Million Btu/hr each, which equates 16.4 tons of RDF per hour (at an assumed heat content of 5,500 Btu/lb.). The combustors can also burn natural gas. The boilers were installed in 1947. The Permittee was issued a permit to convert to burn RDF in 1984.

Each boiler exhausts through separate pollution control equipment, dry lime injection for the control of acid gases and a baghouse for the control of Particulate Matter (PM) and a 187-ft. tall stack. Exhaust gases from each boiler are continuously monitored for Carbon Monoxide (CO), Sulfur Dioxide (SO₂), Nitrogen Oxides (NO_x), opacity, and Oxygen (O₂). A number of operating parameters, including baghouse inlet temperature, and steam flow rate, are also monitored continuously.

Hot water for internal use when the EU 001 and EU 002 are down is provided by a natural gas-fired boiler.

Ash produced in the course of waste combustion is stored in an enclosed area at the facility. The ash is transported using covered trucks to the Red Wing Ash Landfill (permit number SW-307). Other sources of PM emissions are the lime storage silo and RDF receiving building.

1.3. Reason for Permit Amendment

This permit amendment is Minnesota Pollution Control Agency (MPCA)-initiated major amendment under Minn. R. 7007.1600, subp. 1(D); mandatory reopening that is needed in order to assure compliance with applicable requirements.

The amendment incorporates new or revised steam load and maximum temperature limits for the boilers (EU 001 and EU 002) into the referenced permit. The limits have been imposed through performance testing under Minn. R. 7017.2025, subp. 3 and are already in affect. The permits must be reopened in order to reflect the revised limits.

This amendment is from a MPCA Notice of Compliance letters sent on June 7, 1004 and February 17, 2005, that set new limits in Part 70 permits based on performance testing under Minn. R. ch. 7017.

1.3. Facility Emissions:

There are no emissions increases associated with this permit action.

2. Regulatory and/or Statutory Basis

Table 1 Regulatory Overview

Permit No.	Level	Old/New Limits	Basis
04900005-002 NSP d/b/a Xcel Energy –Red Wing	EU 001	<u>Old:</u> Maximum Demonstrated Capacity: Permittee shall not operate the waste combustor at a steam load level above 139,000 lb/hr, (as determined during the May 7-8, 2002 PCDD/PCDF performance test) without conducting a performance test to establish a new maximum demonstrated capacity under part 7011.1225 except during the annual PCDD/PCDF performance and two weeks prior to this test as limited below. During the annual PCDD/PCDF performance test and the two weeks	February 17, 2005 letter from MPCA implementing Minn. R. 7017.2025, subp. 3

		<p>prior to this test, no waste combustor load limitations are applicable.</p> <p><u>New:</u> Steam Flow: less than or equal to 125,760 lb/hr using a 4-hour Block Average as determined during the May 10-13, 2004 PCDD/PCDF performance test. This represents the Maximum Demonstrated Capacity which cannot be exceeded without conducting a performance test to establish a new maximum demonstrated capacity under part 7011.1265, which demonstrates compliance with the emission limitations of 7011.1225 except during the annual PCDD/PCDF performance and the two weeks prior to this test as limited below.</p> <p>During the annual PCDD/PCDF performance test and the two weeks prior to this test, no waste combustor load limitations are applicable.</p>	
	EU 001	<p><u>Old:</u> Temperature: less than or equal to 313 degrees F (as measured during the May 7-8, 2002 PCDD/PCDF performance test) as measured at the inlet to the particulate matter control device.</p> <p>During the annual PCDD/PCDF performance test and the two weeks prior to this test, no particulate matter control device inlet flue gas temperature limit applies.</p> <p><u>New:</u> Temperature: less than or equal to 327 degrees F using a 4-hour Block Average (as measured during the May 10-13, 2004 PCDD/PCDF performance test) as measured at the inlet to the particulate matter control device.</p> <p>During the annual PCDD/PCDF performance test and the two weeks prior to this test, no particulate matter control device inlet flue gas temperature limit applies.</p>	February 17, 2005 letter from MPCA implementing Minn. R. 7017.2025, subp. 3
	EU 002	<p><u>Old:</u> Maximum Demonstrated Capacity: Permittee shall not operate the waste combustor at a steam load level above</p>	June, 7 2004 letter from MPCA implementing Minn. R. 7017.2025, subp.

		<p>121,310 lb/hr, (as determined during the May 7-8, 2002 PCDD/PCDF performance test) without conducting a performance test to establish a new maximum demonstrated capacity under part 7011.1225 except during the annual PCDD/PCDF performance and two weeks prior to this test as limited below.</p> <p>During the annual PCDD/PCDF performance test and the two weeks prior to this test, no waste combustor load limitations are applicable.</p> <p><u>New:</u> Steam Flow: less than or equal to 140,160 lb/hr using a 4-hour Block Average as determined during the May 10-13, 2004 PCDD/PCDF performance test. This represents the Maximum Demonstrated Capacity which cannot be exceeded without conducting a performance test to establish a new maximum demonstrated capacity under part 7011.1265, which demonstrates compliance with the emission limitations of 7011.1225 except during the annual PCDD/PCDF performance and the two weeks prior to this test as limited below.</p> <p>During the annual PCDD/PCDF performance test and the two weeks prior to this test, no waste combustor load limitations are applicable.</p>	3
	EU 002	<p><u>Old:</u> Temperature: less than or equal to 315 degrees F (as measured during the May 7-8, 2002 PCDD/PCDF performance test) as measured at the inlet to the particulate matter control device.</p> <p>During the annual PCDD/PCDF performance test and the two weeks prior to this test, no particulate matter control device inlet flue gas temperature limit applies.</p> <p><u>New:</u> Temperature: less than or equal to 313 degrees F using a 4-hour Block Average (as measured during the May 10-13, 2004 PCDD/PCDF performance</p>	<p>June 7, 2004 letter from MPCA implementing Minn. R. 7017.2025, subp. 3</p>

		test) as measured at the inlet to the particulate matter control device. During the annual PCDD/PCDF performance test and the two weeks prior to this test, no particulate matter control device inlet flue gas temperature limit applies.	
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3. Comments Received

Public Notice Period: June 22, 2005 – July 21, 2005

EPA 45-day Review Period: June 22, 2005 – August 8, 2005

Comments were not received from the public during the public notice period or the EPA review period.

4. Conclusion

Based on the information provided by NSP-Xcel Energy-Red Wing, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 04900005-002 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: Elisabeth Freymiller (permit writer/engineer)
Mike Mondloch (peer reviewer)
Emily Hansen (enforcement)

Attachments: 1. Letter of Compliance with Corresponding Permit Changes
2. CD-01