

**AIR EMISSION PERMIT NO. 05300015- 002**  
**ADMINISTRATIVE AMENDMENT**  
**IS ISSUED TO**

Northern States Power Company

**NSP - RIVERSIDE**

3100 Marshall Street Northeast  
Minneapolis, Hennepin County, MN 554181826

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 |
|---------------------------------------|------------------|
| Total Facility Operating Permit       | 12/14/95         |
| Major Amendment                       | 12/12/97         |
| (Phase II Acid Rain Nox Requirements) |                  |
| Administrative Amendment              | not applicable   |

This permit amendment administratively amends Air Emission Permit No. 05300015- 001, and authorizes the Permittee to operate and modify 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; Part 70 and Acid Rain                      Administrative Amendment

**Issue Date:** 5/21/1996    **Issue Date:** June 26, 2000

**Expiration:** 05/21/2001  
All Title I Conditions do not expire.

---

Richard J. Sandberg, Manager  
Major Facilities Section  
Metro District

for Karen A. Studders  
Commissioner  
Minnesota Pollution Control Agency

## **TABLE OF CONTENTS**

**Notice to the Permittee**

**Permit Shield**

**Facility Description**

**Amendment Description**

**Table A: Limits and Other Requirements**

**Table B: Submittals**

**Appendices: Attached and Referenced in Table A**

**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. Certain requirements which have been determined not to apply are listed in Table A of this permit.

**FACILITY DESCRIPTION:**

The Permittee owns and operates a steam electric generating plant at 3100 Marshall street Northeast in Minneapolis, Minnesota. the sources discharging emissions to the atmosphere are 3 boilers designated as Boilers 6, 7, and 8, fuel/ash handling equipment and fugitive dust sources. Fuels for the boilers are coal, petroleum coke, natural gas, and oil. The plant has a net generating capacity of 360 MW.

The stationary source described in this permit has been determined to be a major source as defined in Minn. R. 7007.0200, subp. 2.

Following is a summary of the potential emission rates, in tons per year, for the stationary source described in this permit:

**Criteria Pollutants (tons/year)**

|                  |        |
|------------------|--------|
| PM <sub>10</sub> | 4,820  |
| SO <sub>2</sub>  | 29,000 |
| NO <sub>x</sub>  | 23,900 |
| CO               | 416    |
| VOCs             | 74     |
| Lead             | 11.1   |

**AMENDMENT DESCRIPTION:**

A major amendment was issued on May 11, 1999. The focus of that amendment was the addition of the Nitrogen Oxides (NO<sub>x</sub>) requirements to the Phase II Acid Rain portion of the Title V operating permit. A few administrative changes were made to the permit to bring it current with the latest rule change. The administrative changes consisted of wording amendments to the opacity language for each boiler subject to only the state opacity rule.

This amendment is an MPCA initiated administrative amendment. It does not change any emissions or permit requirements. The amendment only revises how the requirements were entered into the MPCA database.

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

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

**Subject Item: Total Facility**

| <b>What to do</b>   | <b>Why to do it</b>  |
|---|--|
| <b>A. OPERATIONAL REQUIREMENTS</b>  | hdr  |
| The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.  | Minn. R. 7007.0800, subp. 16   |
| Operating Practices: Clean up all coal spilled on roads or access areas as soon as practicable using methods that minimize the amount of dust suspended.  | Minn. R. 7011.1105 (I)   |
| Access areas, roads, parking facilities:<br>(1) Install asphalt or concrete surfaces or chemical agents on all active truck haul roads of the coal handling facility when the coal throughput by truck is 200,000 tons or greater. All paved roads and areas shall be cleaned to minimize the discharge to the atmosphere of fugitive particulate emissions. Such cleaning shall be accomplished in a manner which minimizes resuspension of particulate matter. Access areas surrounding coal stockpiles and parking facilities which are located within a coal handling facility shall be treated with water, oils, or chemical agents.   | Minn. R. 7011.1105 (A)   |
| Fugitive Emissions: Do not cause or permit the handling, use, transporting, or storage of any material in a manner which may allow avoidable amounts of particulate matter to become airborne. Comply with all other requirements listed in Minn. R. 7011.0150.   | Minn. R. 7011.0150   |
| Noise: The Permittee shall comply with the noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during the operation of any emission units. This is a state only requirement and is not federally enforceable.   | Minn. R. 7030.0010 - 7030.0080                                       |
| Comply with Fugitive Emission Control Plan: The Permittee shall follow the actions and recordkeeping 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 control plan, then the Permittee may be required to amend the control plan and/or to install and operate particulate matter ambient monitors as requested by the Commissioner.   | Minn. Stat. Section 116.07, subd. 4a;<br>Minn. R. 7007.0800, subp. 2 |
| 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. The permittee may require MPCA staff to be accompanied by NSP staff during any inspection.   | Minn. R. 7007.0800, subp. 9(A)                                       |
| 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   |
| Temporary Boilers and Engines: Boilers or engines may be brought on site for less than one year for the purpose of providing steam, heat, or emergency electrical power in place of boilers or engines that are temporarily out of operation. The temporary units may not be operated at the same time as the permanent units that they are meant to replace. Temporary units must have emission rates for all conditions that are less than those identified in the permit, and in lbs/hour for all criteria pollutants, than the permanent units they are replacing.<br><br>Temporary engines or boilers may be used on site that do not replace existing equipment, if the use qualifies as an insignificant activity under Minn. R. 7007.1300, subp. 2.b, Plant upkeep. | Minn R. 7007.0800, subp. 3   |
| <b>B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS</b>  | 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)         |
| <b>C. TESTING REQUIREMENTS</b>  | hdr  |
| 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  |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

|   |   |
|---|---|
| <p>Performance Test Notifications and Submittals:</p> <p>Performance Tests are due as outlined in Tables A and B of the permit. See Table B for additional testing requirements.</p> <p>Performance Test Notification (written): due 30 days before each Performance Test<br/> Performance Test Plan: due 30 days before each Performance Test<br/> Performance Test Pre-test Meeting: due 7 days before each Performance Test<br/> Performance Test Report: due 45 days after each Performance Test<br/> Performance Test Report - Microfiche Copy: due 105 days after each Performance Test</p>   | Minn. R. 7017.2030, subp. 1-4 and Minn. R. 7017.2035, subp. 1-2   |
| <p>Operating and/or production limits will be placed on emission units based on operating conditions during performance testing. Limits set as a result of a performance test (conducted before or after permit issuance) apply until new operating/production limits are set following formal review of a performance test as specified by Minn. R. 7017.2025.</p> <p>This requirement does not apply to EU 001, EU 002, and EU 003. For operating limit requirements applicable to EU 001, EU 002, and EU 003, see requirements pertaining to Short Term Emergency and Testing (STET) and Boiler Operating Conditions in EU 001, EU 002, and EU 003.</p>  | Minn. R. 7017.2025  |
| <p>The results of a performance test are not final until issuance of a review letter by MPCA, unless specified otherwise by Minn. R. 7017.2001 - 7017.2060.</p>   | Minn. R. 7017.2020, subp. 4   |
| <b>D. MONITORING REQUIREMENTS</b>   | hdr   |
| <p>Monitoring Activities and Equipment: Where applicable, initialize monitoring activities and install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring activities are not performed or monitoring equipment is not installed and operational prior to permit issuance.</p>  | Minn. R. 7007.0800, subp. 4(D)  |
| <p>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.</p>   | Minn. R. 7007.0800, subp. 4(D)  |
| <p>Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).</p>   | Minn. R. 7007.0800, subp. 4(D)  |
| <p>Continuous Monitoring Equipment: Maintain 90 percent uptime based on quarterly reporting periods, for all SO<sub>2</sub>, O<sub>2</sub> and Gas Flow continuous monitoring systems and associated equipment.</p> <p>Exemptions from the 90 percent monitoring uptime requirement are:</p> <ol style="list-style-type: none"> <li>1. lightning strikes, earthquakes, tornadoes, and other natural disasters;</li> <li>2. time periods for return and repair of the CEMS to the manufacturer to replace needed parts not included in the manufacturer's list of recommended spare parts;</li> <li>3. time periods for scheduled maintenance based on equipment manufacturer's recommended maintenance schedule and</li> <li>4. time to conduct daily drift checks and required CEMS audits.</li> </ol> | <p>Title I Condition: State Implementation Plan for SO<sub>2</sub></p> <p>This condition expires upon the effective date of EPA approval of the change from this current requirement to the 40 CFR 75 requirements (CEMS QA/QC)</p> |
| <b>E. RECORD KEEPING</b>  | hdr   |
| <p>Record keeping: 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>   | Minn. R. 7007. 0800, subp. 5(B)   |
| <p>Record keeping: 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 strip-chart 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>   | Minn. R. 7007.0800, subp. 5(C)  |
| <p>State Implementation Plan Recordkeeping: retain all records at the stationary source for a period of five (5) years from the date of the required monitoring, sample, measurement, or report that corresponds with the "Title I condition: State Implementation Plan for Sulfur Dioxide" requirement.</p>  | Title I Condition: State Implementation Plan for SO <sub>2</sub>  |
| <p>Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment.</p>   | Minn. R. 7007.0800, subp. 14 and<br>Minn. R. 7007.0800, subp. 16(J)   |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

|  |  |
|--|--|
| The Permittee shall keep records on site that document the hours of operation of the temporary units, and the calculations that demonstrate that emissions are expected to be less than the emissions from the permanent units, if the temporary units are used to replace existing equipment.   | Minn. R. 7007.0800, subp. 5(D)                       |
| <b>F. REPORTING</b>  | hdr  |
| Oral or Written (faxed) Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner of any deviation from the permit conditions which could endanger human health or the environment.   | Minn. R. 7019.1000, subp. 1                          |
| Discovery of Deviations Endangering Human Health or the Environment Report (written): due two working days after discovery of deviation, submit a written description of any deviation endangering human health or the environment to the Commissioner. Include the following information in this written description: cause of the deviation; exact dates of the period of the deviation (if the deviation has not been corrected); whether or not the deviation has been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation. | Minn. R. 7019.1000, subp. 1                          |
| Breakdowns: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any process or control equipment if the breakdown causes any increase in the emissions of any regulated air pollutant.<br><br>At the time of notification or as soon as possible thereafter, the permittee shall inform the Commissioner of the cause of the breakdown and the estimated duration. Notify the Commissioner again when the breakdown is over.  | Minn. R. 7019.1000, subp. 2                          |
| Shutdowns: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any process or control equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. At the time of notification, inform the Commissioner of the cause of the shutdown and the estimated duration. 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. Notify the Commissioner again when the shutdown is over.  | Minn. R. 7019.1000, subp. 3                          |
| Emission Fees: due 60 days after receipt of an MPCA bill.  | Minn. R. 7002.0005 through Minn. R. 7002.0095        |
| 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: The Permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days, provided the proposed deadline extension meets the requirements of Minn. R. 7007.1400, subp. 1(H).  | Minn. R. 7007.1400, subp. 1(H)                       |
| The Permittee shall notify the MPCA if replacement units and permanent units are operated simultaneously verbally within 2 days, and in writing with the semi-annual deviations report.  | Minn. R. 7007.0800, subp. 6(E)                       |
| Deviations from requirements cited as "Title I Condition: State Implementation Plan for Sulfur Dioxide" shall be reported semi-annually with the Semiannual Deviations Report required by this permit. Reporting shall occur even if there were no deviations for this reporting period.   | Title I Condition: State Implementation Plan for SO2 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** GP 001 Emergency Generators**Associated Items:** EU 010 Emergency Engine Generator EEG - 61001

EU 011 Emergency Engine Generator EEG - 61002

| What to do  | Why to do it   |
|---|--|
| Operating Hours: less than or equal to 816 hours/year using 12-month Rolling Sum calculated monthly.  | Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21                                      |
| Calculate and record the monthly and the 12-month rolling sum operating hours for GP 001. Complete the calculation and recording by the end of each month, for the previous month and the previous 12-month period. | Title I Condition: recordkeeping to avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 5 |



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** SV 001

**Associated Items:** EU 001 Boiler 6

EU 002 Boiler 7

EU 008 6/7 Fly Ash Bin

| What to do  | Why to do it  |
|---|---|
| A. EMISSION LIMITS  | hdr   |
| Sulfur Dioxide: less than or equal to 920 lbs/hour using 1-Hour Average during scrubber operation   | Minn. R. 7009.0020  |
| Sulfur Dioxide: less than or equal to 713 lbs/hour using 3-hour Average during scrubber operation.  | Title I Condition: State Implementation Plan for SO <sub>2</sub> and Minn. R. 7009.0020   |
| Sulfur Dioxide: less than or equal to 1180 lbs/hour using 1-Hour Average without scrubber operation.  | Minn. R. 7009.0020  |
| Sulfur Dioxide: less than or equal to 855 lbs/hour using 3-hour Average without scrubber operation  | Title I Condition: State Implementation Plan for SO <sub>2</sub> and Minn. R. 7009.0020   |
| Total Particulate Matter: less than or equal to 129 lbs/hour using 24-hour Block Average  | Minn. R. 7009.0020  |
| B. MONITORING REQUIREMENTS  | hdr   |
| Emissions Monitoring: The owner or operator shall use a CEMS to measure SO <sub>2</sub> , NO <sub>x</sub> , and CO <sub>2</sub> emissions and flow rate for each affected unit in accordance with 40 CFR Section 75.10.   | 40 CFR pt. 75   |
| State Implementation plan Emissions Monitoring: The owner or operator shall use the CEMs to measure SO <sub>2</sub> emissions and flow rate for each affected unit in accordance with 40 CFR Section 75.10.   | Title I Condition: State Implementation Plan for SO <sub>2</sub>                          |
| Emissions Monitoring: The owner or operator shall use a COMS to measure opacity emissions from SV 001.  | Minn. R. 7017.1006  |
| Daily Calibration Error (CE) Test: conduct daily CE testing on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B.  | 40 CFR pt. 75, Appendix B, Section 2.1  |
| Linearity and Leak Check Test (Acid Rain Program): due before end of each calendar quarter following Permit Issuance . Conduct a quarterly linearity test on CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B.  | 40 CFR pt. 75, Appendix B, Section 2.2  |
| Linearity Test Results Summary: due 30 days after end of each calendar quarter following Linearity and Leak Check Test (Acid Rain Program) if performed.  | Minn. R. 7007.0800, subp. 2   |
| CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar half-year following Permit Issuance. Conduct a RATA on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B. If the RATA results indicate a relative accuracy of 7.5% or less, the next RATA is required in twelve (12) months.                             | 40 CFR pt. 75, Appendix B, Section 2.3  |
| Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA)   | Minn. R. 7007.0800, subp. 2   |
| Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA) (in which the CEMS RATA was conducted).  | Minn. R. 7007.0800, subp. 2   |
| CEMS QA/QC: The owner or operator of an affected facility shall operate, calibrate, and maintain each CEM according to the QA/QC procedure in 40 CFR pt. 75, Appendix B as amended.   | Title I Condition: State Implementation Plan for SO <sub>2</sub> and 40 CFR Section 75.21 |
| CEMS and COMS Continuous Operation: Except for system downtime due to damage from unavoidable events, sudden and not reasonably preventable monitor breakdowns, scheduled monitor maintenance, daily drift checks, calibration error audits, linearity checks, relative accuracy test audits and cylinder gas audits, all CEMS and COMS shall be in continuous operation. | Minn. R. 7017.1090  |
| 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. The COMS must be adjusted whenever the calibration drift (CD) exceeds twice the specifications of PS-1 of 40 CFR pt. 60, Appendix B. Daily CD Checks are required only during periods of operation.            | Minn. R. 7017.1210, subp. 2   |
| COMS Calibration Error Audit: due before end of each calendar half-year following Permit Issuance . Conduct audits at least 3 months apart but no greater than 8 months apart. Audits are required only during periods of operation.  | Minn. R. 7017.1210, subp. 3   |
| COMS Calibration Error Audit Results Summary: due 30 days after end of each calendar half-year following COMS Calibration Error Audit   | Minn. R. 7007.0800, subp. 2   |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

|   |   |
|---|---|
| C. RECORD KEEPING   | hdr   |
| Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support the information for a period of five (5) years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.   | Minn. R. 7007.0800, subp. 5 and<br>Minn. R. 7017.1130 |
| Recordkeeping: The owner or operator must retain records of all COMS monitoring data and support information for a period of five (5) years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.   | Minn. R. 7007.0800, subp. 5 and<br>Minn. R. 7017.1130 |
| D. REPORTING  | hdr   |
| Excess Emissions/Downtime Reports (EER's): due 30 days after the end of each calendar quarter following Permit Issuance (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of exceedance of the limit for SO2 including exceedances allowed by the applicable standard, i.e. during startup, shutdown, and malfunctions. | Title I Condition: State Implementation Plan for SO2  |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** SV 002**Associated Items:** EU 001 Boiler 6

EU 002 Boiler 7

EU 008 6/7 Fly Ash Bin

| What to do  | Why to do it  |
|---|---|
| A. EMISSION LIMITS  | hdr   |
| Sulfur Dioxide: less than or equal to 920 lbs/hour using 1-Hour Average during scrubber operation   | Minn. R. 7009.0020  |
| Sulfur Dioxide: less than or equal to 713 lbs/hour using 3-hour Average during scrubber operation.  | Title I Condition: State Implementation Plan for SO <sub>2</sub> and Minn. R. 7009.0020   |
| Sulfur Dioxide: less than or equal to 1180 lbs/hour using 1-Hour Average without scrubber operation.  | Minn. R. 7009.0020  |
| Sulfur Dioxide: less than or equal to 855 lbs/hour using 3-hour Average without scrubber operation  | Title I Condition: State Implementation Plan for SO <sub>2</sub> and Minn. R. 7009.0020   |
| Total Particulate Matter: less than or equal to 129 lbs/hour using 24-hour Block Average  | Minn. R. 7009.0020  |
| B. MONITORING REQUIREMENTS  | hdr   |
| Emissions Monitoring: The owner or operator shall use a CEMS to measure SO <sub>2</sub> , NO <sub>x</sub> , and CO <sub>2</sub> emissions and flow rate for each affected unit in accordance with 40 CFR Section 75.10.   | 40 CFR pt. 75   |
| State Implementation plan Emissions Monitoring: The owner or operator shall use the CEMs to measure SO <sub>2</sub> emissions and flow rate for each affected unit in accordance with 40 CFR Section 75.10.   | Title I Condition: State Implementation Plan for SO <sub>2</sub>                          |
| Emissions Monitoring: The owner or operator shall use a COMS to measure opacity emissions from SV 002.  | Minn. R. 7017.1006  |
| Daily Calibration Error (CE) Test: conduct daily CE testing on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B.  | 40 CFR pt. 75, Appendix B, Section 2.1  |
| Linearity and Leak Check Test (Acid Rain Program): due before end of each calendar quarter following Permit Issuance . Conduct a quarterly linearity test on CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B.  | 40 CFR pt. 75, Appendix B, Section 2.2  |
| Linearity Test Results Summary: due 30 days after end of each calendar quarter following Linearity and Leak Check Test (Acid Rain Program) if performed.  | Minn. R. 7007.0800, subp. 2   |
| CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar half-year following Permit Issuance. Conduct a RATA on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B. If the RATA results indicate a relative accuracy of 7.5% or less, the next RATA is required in twelve (12) months.                             | 40 CFR pt. 75, Appendix B, Section 2.3  |
| Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA)   | Minn. R. 7007.0800, subp. 2   |
| Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA) (in which the CEMS RATA was conducted).  | Minn. R. 7007.0800, subp. 2   |
| CEMS QA/QC: The owner or operator of an affected facility shall operate, calibrate, and maintain each CEM according to the QA/QC procedure in 40 CFR pt. 75, Appendix B as amended.   | Title I Condition: State Implementation Plan for SO <sub>2</sub> and 40 CFR Section 75.21 |
| CEMS and COMS Continuous Operation: Except for system downtime due to damage from unavoidable events, sudden and not reasonably preventable monitor breakdowns, scheduled monitor maintenance, daily drift checks, calibration error audits, linearity checks, relative accuracy test audits and cylinder gas audits, all CEMS and COMS shall be in continuous operation. | Minn. R. 7017.1090  |
| 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. The COMS must be adjusted whenever the calibration drift (CD) exceeds twice the specifications of PS-1 of 40 CFR pt. 60, Appendix B. Daily CD Checks are required only during periods of operation.            | Minn. R. 7017.1210, subp. 2   |
| COMS Calibration Error Audit: due before end of each calendar half-year following Permit Issuance . Conduct audits at least 3 months apart but no greater than 8 months apart. Audits are required only during periods of operation.  | Minn. R. 7017.1210, subp. 3   |
| COMS Calibration Error Audit Results Summary: due 30 days after end of each calendar half-year following COMS Calibration Error Audit   | Minn. R. 7007.0800, subp. 2   |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

|   |   |
|---|---|
| C. RECORD KEEPING   | hdr   |
| Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five (5) years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.   | Minn. R. 7007.0800, subp. 5 and<br>Minn. R. 7017.1130 |
| Recordkeeping: The owner or operator must retain records of all COMS monitoring data and support information for a period of five (5) years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.   | Minn. R. 7007.0800, subp. 5 and<br>Minn. R. 7017.1130 |
| D. REPORTING  | hdr   |
| Excess Emissions/Downtime Reports (EER's): due 30 days after the end of each calendar quarter following Permit Issuance (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of exceedance of the limit for SO2 including exceedances allowed by the applicable standard, i.e. during startup, shutdown, and malfunctions. | Title I Condition: State Implementation Plan for SO2  |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** SV 003

**Associated Items:** EU 003 Boiler 8

EU 009 Unit 8 Fly Ash Bin

| What to do  | Why to do it  |
|---|---|
| A. EMISSION LIMITS  | hdr   |
| Sulfur Dioxide: less than or equal to 6150 lbs/hour using 3-hour Average  | Title I Condition: State Implementation Plan for SO <sub>2</sub> and Minn. R. 7009.0020   |
| B. MONITORING REQUIREMENTS  | hdr   |
| Emissions Monitoring: The owner or operator shall use a CEMS to measure SO <sub>2</sub> , NO <sub>x</sub> , and CO <sub>2</sub> emissions and flow rate for each affected unit in accordance with 40 CFR Section 75.10.   | 40 CFR pt. 75   |
| State Implementation plan Emissions Monitoring: The owner or operator shall use the CEMS to measure SO <sub>2</sub> emissions and flow rate for each affected unit in accordance with 40 CFR Section 75.10.   | Title I Condition: State Implementation Plan for SO <sub>2</sub>                          |
| Emissions Monitoring: The owner or operator shall use a COMS to measure opacity emissions from SV 003.  | Minn. R. 7017.1006  |
| Daily Calibration Error (CE) Test: conduct daily CE testing on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B.  | 40 CFR pt. 75, Appendix B, Section 2.1  |
| Linearity and Leak Check Test (Acid Rain Program): due before end of each calendar quarter following Permit Issuance . Conduct a quarterly linearity test on CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B.  | 40 CFR pt. 75, Appendix B, Section 2.2  |
| Linearity Test Results Summary: due 30 days after end of each calendar quarter following Linearity and Leak Check Test (Acid Rain Program) if performed.  | Minn. R. 7007.0800, subp. 2   |
| CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar half-year following Permit Issuance. Conduct a RATA on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B. If the RATA results indicate a relative accuracy of 7.5% or less, the next RATA is required in twelve (12) months.                             | 40 CFR pt. 75, Appendix B, Section 2.3  |
| Relative Accuracy Test Audit (RATA) Notification: due 30 days before CEMS Relative Accuracy Test Audit (RATA)   | Minn. R. 7007.0800, subp. 2   |
| Relative Accuracy Test Audit (RATA) Results Summary: due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA) (in which the CEMS RATA was conducted).  | Minn. R. 7007.0800, subp. 2   |
| CEMS QA/QC: The owner or operator of an affected facility shall operate, calibrate, and maintain each CEM according to the QA/QC procedure in 40 CFR pt. 75, Appendix B as amended.   | Title I Condition: State Implementation Plan for SO <sub>2</sub> and 40 CFR Section 75.21 |
| CEMS and COMS Continuous Operation: Except for system downtime due to damage from unavoidable events, sudden and not reasonably preventable monitor breakdowns, scheduled monitor maintenance, daily drift checks, calibration error audits, linearity checks, relative accuracy test audits and cylinder gas audits, all CEMS and COMS shall be in continuous operation. | Minn. R. 7017.1090  |
| 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. The COMS must be adjusted whenever the calibration drift (CD) exceeds twice the specifications of PS-1 of 40 CFR pt. 60, Appendix B. Daily CD Checks are required only during periods of operation.            | Minn. R. 7017.1210, subp. 2   |
| COMS Calibration Error Audit: due before end of each calendar half-year following Permit Issuance . Conduct audits at least 3 months apart but no greater than 8 months apart. Audits are required only during periods of operation.  | Minn. R. 7017.1210, subp. 3   |
| COMS Calibration Error Audit Results Summary: due 30 days after end of each calendar half-year following COMS Calibration Error Audit   | Minn. R. 7007.0800, subp. 2   |
| C. RECORD KEEPING   | hdr   |
| Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five (5) years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.   | Minn. R. 7007.0800, subp. 5 and Minn. R. 7017.1130  |
| Recordkeeping: The owner or operator must retain records of all COMS monitoring data and support information for a period of five (5) years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.   | Minn. R. 7007.0800, subp. 5 and Minn. R. 7017.1130  |
| D. REPORTING  | hdr   |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

Excess Emissions/Downtime Reports (EER's): due 30 days after the end of each calendar quarter following Permit Issuance (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of exceedance of the limit for SO2 including exceedances allowed by the applicable standard, i.e. during startup, shutdown, and malfunctions.

Title I Condition: State Implementation Plan for SO2

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** EU 001 Boiler 6

**Associated Items:** CE 001 Gas Scrubber (General, Not Classified)

CE 002 Fabric Filter - Low Temperature, i.e., T&lt;180 Degrees F

SV 001

SV 002

| What to do   | Why to do it   |
|--|--|
| A. EMISSION LIMITS   | hdr  |
| Sulfur Dioxide: less than or equal to 1.07 lbs/million Btu heat input using 1-Hour Average during scrubber operation   | Minn. R. 7009.0020; 40 CFR Section 50.6; meets requirements of Minn. R. 7011.0510, subp. 1   |
| Sulfur Dioxide: less than or equal to 0.83 lbs/million Btu heat input using 3-hour Average during scrubber operation   | Title I Condition: State Implementation Plan for SO <sub>2</sub> and Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1 |
| Sulfur Dioxide: less than or equal to 1.49 lbs/million Btu heat input using 1-Hour Average without scrubber operation  | Minn. R. 7009.0020; 40 CFR Section 50.6; meets requirements of Minn. R. 7011.0510, subp. 1   |
| Sulfur Dioxide: less than or equal to 1.00 lbs/million Btu heat input using 3-hour Average without scrubber operation  | Title I Condition: State Implementation Plan for SO <sub>2</sub> and Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1 |
| Sulfur Dioxide: less than or equal to 0.9 lbs/million Btu heat input using 30-day Rolling Average  | Settlement Agreement with NSP, June 10, 1983, Docket No. PCA-83-003-AK   |
| Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input   | Minn. R. 7011.0510, subp. 1  |
| Opacity: less than or equal to 20 percent opacity using 6-minute Average except for one six-minute period per hour of not more than 60 percent opacity.  | Minn. R. 7011.0510, subp. 2  |
| Comply with the applicable Acid Rain emissions limitation of sulfur dioxide.   | 40 CFR Section 72.9(c)(1)(i),<br>40 CFR Section 72.9(g)(4)   |
| NO <sub>x</sub> Averaging Plan<br><br>Beginning January 1, 2000 either:<br><br>Maintain an annual average NO <sub>x</sub> emission rate of 0.85 lbs/MMBtu and limit the annual heat input to less than or equal to 4,324,500 MMBtu per year.<br><br>OR<br><br>Maintain a Btu-weighted annual average emission rate in lbs/MMBtu, averaged over the units specified in the NO <sub>x</sub> averaging plan, that is less than or equal to the Btu-weighted annual average emission rate averaged over the same units had they each been operated during the same period of time in compliance with the applicable emission limitations in 40 CFR Sections 76.5, 76.6, or 76.7. Units covered in the plan are:<br><br>Plant                      Boiler ID#<br><br>Allen S. King              1<br>Black Dog                  1,3,4<br>High Bridge                3,4,5,6<br>Minnesota Valley        4<br>Riverside                  6,7,8<br>Sherburne County        1,2,3 | 40 CFR Section 76.11   |
| B. OPERATIONAL REQUIREMENTS  | hdr  |
| Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount not less than the total annual emissions of sulfur dioxide for the previous calendar year.   | 40 CFR Section 72.9(c)(1)(i),<br>40 CFR Section 72.9(g)(4)   |
| Allowed fuel types: coal, petroleum coke, distillate fuel oil, natural gas, petroleum derived used oil.  | Title I Condition: State Implementation Plan for SO <sub>2</sub>   |
| Sulfur Content of Fuel: less than or equal to 0.5 percent by weight for distillate fuel oil.   | Minn. R. 7007.0800, subp 2; meets SO <sub>2</sub> emission limit requirement in Minn. R. 7011.0510, subp. 1                                |
| Combust used oil in accordance with used oil regulations in Minn. R. 7045. Limit used oil combustion to 10% of total fuel mass input on an hourly basis.   | Minn. R. 7007.0800, subp. 2; Minn. R. 7045   |
| Soils or materials resulting from cleanup of spills of; gasoline, permitted fuels or petroleum derived used oils generated on-site or within the NSP system that meet the requirement of Minn. R. 7045 are limited to 10% of the total fuel input on a mass basis.   | Minn. R. 7007.0800, subp. 2  |

# TABLE A: LIMITS AND OTHER REQUIREMENTS

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

|  |                             |
|--|-----------------------------|
| Boiler chemical cleaning waste limited to: the lessor of 5% of the heat or mass input to the boiler, unless good combustion is demonstrated at a higher flow rate; cleaning waste shall be introduced into the boiler when the boiler is operating at a level of at least 75 percent of rated capacity; records of boiler cleaning agent incineration shall be kept on file, including dates, amounts, origin of material, cleaning agent boiler feed rate, and operating capacity of the boiler during incineration, including steam flow. The Permittee is not authorized for subsequent disposals of cleaning agents at the higher burn rate until written approval has been received from the MPCA.  | Minn. R. 7007.0800, subp. 2 |
| C. TESTING REQUIREMENTS  | hdr                         |
| Initial Performance Test: due 180 days after Permit Issuance to measure particulate matter emissions.  | Minn. R. 7017.2020, subp. 1 |
| Boiler Alternative Operating Conditions for Performance Testing:<br><br>Alternative Operating Conditions during testing are defined as 90 percent to 100 percent of the boiler's maximum normal (continuous) operating load or the maximum permitted operating rate, whichever is lower. The basis for this number must be included in the test plan. If testing is conducted at the alternative operating condition established, an operating limit will not be established as a result of performance testing.<br><br>In no case will the new operating rate limit be higher than allowed by an existing permit condition.   | Minn. R. 7007.0800, subp. 2 |
| Boiler Operating Conditions Not Meeting the Alternative Operating Conditions During Performance Testing:<br><br>If performance testing is not conducted at or above the established alternative operating condition, then the boiler operating rate will be limited on an 8-hour block average based on the following:<br><br>(1) If the results of the performance test are greater than 90 percent of any applicable emission limit for which emissions are measured, then the boiler operation will be limited to the tested operating rate.<br><br>(2) If results are less than or equal to 90 percent of all applicable emission limits for which emissions are measured, boiler operation will be limited to 110 percent of the tested operating rate.<br><br>In no case will the new operating rate limit be higher than allowed by an existing permit condition. | Minn. R. 7007.0800, subp. 2 |
| STET (Short Term Emergency and Testing) Operating Hours Limit:<br>The boiler may operate up to 40 hours per year to demonstrate the Uniform Rating of Generating Equipment (URGE) capacity and to meet emergency energy supply needs. Documentation of all STET operation shall be maintained. The boiler must meet emission limits during STET operation.   | Minn. R. 7007.0800, subp. 2 |
| STET Operation Definition that applies to Boilers that Meet or do Not Meet the Alternative Operating Conditions for Performance Testing:<br><br>If performance test results measure emissions at 90 percent or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110 percent of the average operating rate achieved during that performance test.<br><br>If performance test results measure emissions at greater than 90 percent of any applicable emission limit for any tested pollutant, STET operation is defined as operation beyond 100 percent of the average operating rate achieved during that performance test.<br><br>In no case will STET operation be higher than allowed by an existing permit condition.   | Minn. R. 7007.0800, subp. 2 |
| The results of a performance test are not final until issuance of a review letter by MPCA, unless specified otherwise by Minn. R. 7017.2001 - 7017.2060.   | Minn. R. 7017.2020, subp. 4 |
| D. RECORD KEEPING  | hdr                         |
| Keep on site at the source each of the following documents for a period of five (5) years from the date the document was created: The certificate of representation, all emissions monitoring information, copies of all reports, compliance certifications, and other submissions or records made under the Acid Rain Program, copies of all documents used to complete an acid rain permit application.  | 40 CFR Section 72.9(f)(l)   |
| Record Keeping for alternative fuels and waste products: Keep records of the type and quantity of used oil, materials resulting from spills, or boiler cleaning agents burned during each period of incineration.  | Minn. R. 7007.0800          |



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

|   |                        |
|---|------------------------|
| E. REPORTING  | hdr                    |
| Each submission under the Acid Rain Program shall be submitted, signed, and certified by the designated representative for all sources on behalf of which the submission is made in accordance with 40 CFR Section 72.21. | 40 CFR Section 72.21   |
| If the unit has excess emissions, the designated representative shall submit a proposed offset plan in accordance with 40 CFR ' 72.9(e).  | 40 CFR Section 72.9(e) |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** EU 002 Boiler 7

**Associated Items:** CE 001 Gas Scrubber (General, Not Classified)

CE 002 Fabric Filter - Low Temperature, i.e., T&lt;180 Degrees F

SV 001

SV 002

| What to do   | Why to do it   |
|--|--|
| A. EMISSION LIMITS   | hdr  |
| Sulfur Dioxide: less than or equal to 1.07 lbs/million Btu heat input using 1-Hour Average during scrubber operation   | Minn. R. 7009.0020; 40 CFR Section 50.6; meets requirements of Minn. R. 7011.0510, subp. 1   |
| Sulfur Dioxide: less than or equal to 0.83 lbs/million Btu heat input using 3-hour Average during scrubber operation   | Title I Condition: State Implementation Plan for SO <sub>2</sub> and Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1 |
| Sulfur Dioxide: less than or equal to 1.49 lbs/million Btu heat input using 1-Hour Average without scrubber operation  | Minn. R. 7009.0020; 40 CFR Section 50.6; meets requirements of Minn. R. 7011.0510, subp. 1   |
| Sulfur Dioxide: less than or equal to 1.00 lbs/million Btu heat input using 3-hour Average without scrubber operation  | Title I Condition: State Implementation Plan for SO <sub>2</sub> and Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1 |
| Sulfur Dioxide: less than or equal to 0.9 lbs/million Btu heat input using 30-day Rolling Average  | Settlement Agreement with NSP, June 10, 1983, Docket No. PCA-83-003-AK   |
| Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input   | Minn. R. 7011.0510, subp. 1  |
| Opacity: less than or equal to 20 percent opacity using 6-minute Average except for one six-minute period per hour of not more than 60 percent opacity.  | Minn. R. 7011.0510, subp. 2  |
| Comply with the applicable Acid Rain emissions limitation of sulfur dioxide.   | 40 CFR Section 72.9(c)(1)(i),<br>40 CFR Section 72.9(g)(4)   |
| NO <sub>x</sub> Averaging Plan<br><br>Beginning January 1, 2000 either:<br><br>Maintain an annual average NO <sub>x</sub> emission rate of 0.85 lbs/MMBtu and limit the annual heat input to less than or equal to 4,324,500 MMBtu per year.<br><br>OR<br><br>Maintain a Btu-weighted annual average emission rate in lbs/MMBtu, averaged over the units specified in the NO <sub>x</sub> averaging plan, that is less than or equal to the Btu-weighted annual average emission rate averaged over the same units had they each been operated during the same period of time in compliance with the applicable emission limitations in 40 CFR Sections 76.5, 76.6, or 76.7. Units covered in the plan are:<br><br>Plant                      Boiler ID#<br><br>Allen S. King              1<br>Black Dog                  1,3,4<br>High Bridge                3,4,5,6<br>Minnesota Valley        4<br>Riverside                  6,7,8<br>Sherburne County        1,2,3 | 40 CFR Section 76.11   |
| B. OPERATIONAL REQUIREMENTS  | hdr  |
| Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount not less than the total annual emissions of sulfur dioxide for the previous calendar year.   | 40 CFR Section 72.9(c)(1)(i),<br>40 CFR Section 72.9(g)(4)   |
| Allowed fuel types: coal, petroleum coke, distillate fuel oil, natural gas, and petroleum derived used oil.  | Title I Condition: State Implementation Plan for SO <sub>2</sub>   |
| Sulfur Content of Fuel: less than or equal to 0.5 percent by weight for distillate fuel oil.   | Minn. R. 7007.0800, subp 2; meets SO <sub>2</sub> emission limit requirement in Minn. R. 7011.0510, subp. 1                                |
| Combust used oil in accordance with used oil regulations in Minn. R. 7045. Limit used oil combustion to 10% of total fuel mass input on an hourly basis.   | Minn. R. 7007.0800, subp. 2; Minn. R. 7045   |
| Soils or materials resulting from cleanup of spills of; gasoline, permitted fuels or petroleum derived used oils generated on-site or within the NSP system that meet the requirement of Minn. R. 7045 are limited to 10% of the total fuel input on a mass basis.   | Minn. R. 7007.0800, subp. 2  |

# TABLE A: LIMITS AND OTHER REQUIREMENTS

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

|  |                             |
|--|-----------------------------|
| Boiler chemical cleaning waste limited to: the lessor of 5% of the heat or mass input to the boiler, unless good combustion is demonstrated at a higher flow rate; cleaning waste shall be introduced into the boiler when the boiler is operating at a level of at least 75 percent of rated capacity; records of boiler cleaning agent incineration shall be kept on file, including dates, amounts, origin of material, cleaning agent boiler feed rate, and operating capacity of the boiler during incineration, including steam flow. The Permittee is not authorized for subsequent disposals of cleaning agents at the higher burn rate until written approval has been received from the MPCA.  | Minn. R. 7007.0800, subp. 2 |
| C. TESTING REQUIREMENTS  | hdr                         |
| Initial Performance Test: due 180 days after Permit Issuance to measure particulate matter emissions.  | Minn. R. 7017.2020, subp. 1 |
| Boiler Alternative Operating Conditions for Performance Testing:<br><br>Alternative Operating Conditions during testing are defined as 90 percent to 100 percent of the boiler's maximum normal (continuous) operating load or the maximum permitted operating rate, whichever is lower. The basis for this number must be included in the test plan. If testing is conducted at the alternative operating condition established, an operating limit will not be established as a result of performance testing.<br><br>In no case will the new operating rate limit be higher than allowed by an existing permit condition.   | Minn. R. 7007.0800, subp. 2 |
| Boiler Operating Conditions Not Meeting the Alternative Operating Conditions During Performance Testing:<br><br>If performance testing is not conducted at or above the established alternative operating condition, then the boiler operating rate will be limited on an 8-hour block average based on the following:<br><br>(1) If the results of the performance test are greater than 90 percent of any applicable emission limit for which emissions are measured, then the boiler operation will be limited to the tested operating rate.<br><br>(2) If results are less than or equal to 90 percent of all applicable emission limits for which emissions are measured, boiler operation will be limited to 110 percent of the tested operating rate.<br><br>In no case will the new operating rate limit be higher than allowed by an existing permit condition. | Minn. R. 7007.0800, subp. 2 |
| STET (Short Term Emergency and Testing) Operating Hours Limit:<br>The boiler may operate up to 40 hours per year to demonstrate the Uniform Rating of Generating Equipment (URGE) capacity and to meet emergency energy supply needs. Documentation of all STET operation shall be maintained. The boiler must meet emission limits during STET operation.   | Minn. R. 7007.0800, subp. 2 |
| STET Operation Definition that applies to Boilers that Meet or do Not Meet the Alternative Operating Conditions for Performance Testing:<br><br>If performance test results measure emissions at 90 percent or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110 percent of the average operating rate achieved during that performance test.<br><br>If performance test results measure emissions at greater than 90 percent of any applicable emission limit for any tested pollutant, STET operation is defined as operation beyond 100 percent of the average operating rate achieved during that performance test.<br><br>In no case will STET operation be higher than allowed by an existing permit condition.   | Minn. R. 7007.0800, subp. 2 |
| The results of a performance test are not final until issuance of a review letter by MPCA, unless specified otherwise by Minn. R. 7017.2001 - 7017.2060.   | Minn. R. 7017.2020, subp. 4 |
| D. RECORD KEEPING  | hdr                         |
| Keep on site at the source each of the following documents for a period of five (5) years from the date the document was created: The certificate of representation, all emissions monitoring information, copies of all reports, compliance certifications, and other submissions or records made under the Acid Rain Program, copies of all documents used to complete an acid rain permit application.  | 40 CFR Section 72.9(f)(l)   |
| Record Keeping for alternative fuels and waste products: Keep records of the type and quantity of used oil, materials resulting from spills, or boiler cleaning agents burned during each period of incineration.  | Minn. R. 7007.0800          |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

|   |                        |
|---|------------------------|
| E. REPORTING  | hdr                    |
| Each submission under the Acid Rain Program shall be submitted, signed, and certified by the designated representative for all sources on behalf of which the submission is made in accordance with 40 CFR Section 72.21. | 40 CFR Section 72.21   |
| If the unit has excess emissions, the designated representative shall submit a proposed offset plan in accordance with 40 CFR ' 72.9(e).  | 40 CFR Section 72.9(e) |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** EU 003 Boiler 8

**Associated Items:** CE 003 Electrostatic Precipitator - High Efficiency

CE 004 Electrostatic Precipitator - High Efficiency

CE 005 Electrostatic Precipitator - High Efficiency

SV 003

| What to do  | Why to do it   |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
|---|--|------------|---------------|---|-----------|-------|-------------|---------|------------------|---|-----------|-------|------------------|-------|----------------------|
| A. EMISSION LIMITS  | hdr  |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Sulfur Dioxide: less than or equal to 2.7 lbs/million Btu heat input using 1-Hour Average   | Minn. R. 7009.0020; 40 CFR Section 50.6; meets requirements of Minn. R. 7011.0510, subp. 1   |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Sulfur Dioxide: less than or equal to 2.7 lbs/million Btu heat input using 3-hour Average   | Title I Condition: State Implementation Plan for SO <sub>2</sub> and Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1                         |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Sulfur Dioxide: less than or equal to 2.5 lbs/million Btu heat input using 365-day Rolling Average  | Title I Condition: State Implementation Plan for SO <sub>2</sub> and Minn. R. 7009.0020 and Settlement Agreement with NSP, June 10, 1983, Docket No. PCA-83-003-AK |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Total Particulate Matter: less than or equal to 0.4 lbs/million Btu heat input  | Minn. R. 7011.0510, subp. 1; meets requirements of Minn. R. 7009.0020  |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Opacity: less than or equal to 20 percent opacity using 6-minute Average except for one six-minute period per hour of not more than 60 percent opacity.   | Minn. R. 7011.0510, subp. 2  |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Comply with the applicable Acid Rain emissions limitation of sulfur dioxide.  | 40 CFR Section 72.9(c)(1)(i),<br>40 CFR Section 72.9(g)(4)   |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| <p>NO<sub>x</sub> Averaging Plan</p> <p>Beginning January 1, 2000 either:</p> <p>Maintain an annual average NO<sub>x</sub> emission rate of 0.82 lbs/MMBtu and maintain the annual heat input to equal to or greater than 10,821,000 MMBtu per year.</p> <p>OR</p> <p>Maintain a Btu-weighted annual average emission rate in lbs/MMBtu, averaged over the units specified in the NO<sub>x</sub> averaging plan, that is less than or equal to the Btu-weighted annual average emission rate averaged over the same units had they each been operated during the same period of time in compliance with the applicable emission limitations in 40 CFR Sections 76.5, 76.6, or 76.7. Units covered in the plan are:</p> <table> <tr> <td>Plant</td><td>Boiler ID#</td></tr> <tr> <td>Allen S. King</td><td>1</td></tr> <tr> <td>Black Dog</td><td>1,3,4</td></tr> <tr> <td>High Bridge</td><td>3,4,5,6</td></tr> <tr> <td>Minnesota Valley</td><td>4</td></tr> <tr> <td>Riverside</td><td>6,7,8</td></tr> <tr> <td>Sherburne County</td><td>1,2,3</td></tr> </table> | Plant  | Boiler ID# | Allen S. King | 1 | Black Dog | 1,3,4 | High Bridge | 3,4,5,6 | Minnesota Valley | 4 | Riverside | 6,7,8 | Sherburne County | 1,2,3 | 40 CFR Section 76.11 |
| Plant   | Boiler ID#   |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Allen S. King   | 1  |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Black Dog   | 1,3,4  |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| High Bridge   | 3,4,5,6  |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Minnesota Valley  | 4  |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Riverside   | 6,7,8  |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Sherburne County  | 1,2,3  |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| B. OPERATIONAL REQUIREMENTS   | hdr  |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount not less than the total annual emissions of sulfur dioxide for the previous calendar year.  | 40 CFR Section 72.9(c)(1)(i),<br>40 CFR Section 72.9(g)(4)   |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Allowed fuel types: coal, petroleum coke, distillate fuel oil, natural gas, and petroleum derived used oil.   | Title I Condition: State Implementation Plan for SO <sub>2</sub>   |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Sulfur Content of Fuel: less than or equal to 0.5 percent by weight for distillate fuel oil.  | Minn. R. 7007.0800, subp 2; meets SO <sub>2</sub> emission limit requirement in Minn. R. 7011.0510, subp. 1  |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Combust used oil in accordance with used oil regulations in Minn. R. 7045. Limit used oil combustion to 10% of total fuel mass input on an hourly basis.  | Minn. R. 7007.0800, subp. 2; Minn. R. 7045   |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |
| Soils or materials resulting from cleanup of spills of; gasoline, permitted fuels or petroleum derived used oils generated on-site or within the NSP system that meet the requirement of Minn. R. 7045 are limited to 10% of the total fuel input on a mass basis.  | Minn. R. 7007.0800, subp. 2  |            |               |   |           |       |             |         |                  |   |           |       |                  |       |                      |

# TABLE A: LIMITS AND OTHER REQUIREMENTS

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

|  |                             |
|--|-----------------------------|
| Boiler chemical cleaning waste limited to: the lessor of 5% of the heat or mass input to the boiler, unless good combustion is demonstrated at a higher flow rate; cleaning waste shall be introduced into the boiler when the boiler is operating at a level of at least 75 percent of rated capacity; records of boiler cleaning agent incineration shall be kept on file, including dates, amounts, origin of material, cleaning agent boiler feed rate, and operating capacity of the boiler during incineration, including steam flow. The Permittee is not authorized for subsequent disposals of cleaning agents at the higher burn rate until written approval has been received from the MPCA.  | Minn. R. 7007.0800, subp. 2 |
| C. TESTING REQUIREMENTS  | hdr                         |
| Initial Performance Test: due 180 days after Permit Issuance to measure particulate matter emissions.  | Minn. R. 7017.2020, subp. 1 |
| Boiler Alternative Operating Conditions for Performance Testing:<br><br>Alternative Operating Conditions during testing are defined as 90 percent to 100 percent of the boiler's maximum normal (continuous) operating load or the maximum permitted operating rate, whichever is lower. The basis for this number must be included in the test plan. If testing is conducted at the alternative operating condition established, an operating limit will not be established as a result of performance testing.<br><br>In no case will the new operating rate limit be higher than allowed by an existing permit condition.   | Minn. R. 7007.0800, subp. 2 |
| Boiler Operating Conditions Not Meeting the Alternative Operating Conditions During Performance Testing:<br><br>If performance testing is not conducted at or above the established alternative operating condition, then the boiler operating rate will be limited on an 8-hour block average based on the following:<br><br>(1) If the results of the performance test are greater than 90 percent of any applicable emission limit for which emissions are measured, then the boiler operation will be limited to the tested operating rate.<br><br>(2) If results are less than or equal to 90 percent of all applicable emission limits for which emissions are measured, boiler operation will be limited to 110 percent of the tested operating rate.<br><br>In no case will the new operating rate limit be higher than allowed by an existing permit condition. | Minn. R. 7007.0800, subp. 2 |
| STET (Short Term Emergency and Testing) Operating Hours Limit:<br>The boiler may operate up to 40 hours per year to demonstrate the Uniform Rating of Generating Equipment (URGE) capacity and to meet emergency energy supply needs. Documentation of all STET operation shall be maintained. The boiler must meet emission limits during STET operation.   | Minn. R. 7007.0800, subp. 2 |
| STET Operation Definition that applies to Boilers that Meet or do Not Meet the Alternative Operating Conditions for Performance Testing:<br><br>If performance test results measure emissions at 90 percent or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110 percent of the average operating rate achieved during that performance test.<br><br>If performance test results measure emissions at greater than 90 percent of any applicable emission limit for any tested pollutant, STET operation is defined as operation beyond 100 percent of the average operating rate achieved during that performance test.<br><br>In no case will STET operation be higher than allowed by an existing permit condition.   | Minn. R. 7007.0800, subp. 2 |
| The results of a performance test are not final until issuance of a review letter by MPCA, unless specified otherwise by Minn. R. 7017.2001 - 7017.2060.   | Minn. R. 7017.2020, subp. 4 |
| D. RECORD KEEPING  | hdr                         |
| Keep on site at the source each of the following documents for a period of five (5) years from the date the document was created: The certificate of representation, all emissions monitoring information, copies of all reports, compliance certifications, and other submissions or records made under the Acid Rain Program, copies of all documents used to complete an acid rain permit application.  | 40 CFR Section 72.9(f)(l)   |
| Record Keeping for alternative fuels and waste products: Keep records of the type and quantity of used oil, materials resulting from spills, or boiler cleaning agents burned during each period of incineration.  | Minn. R. 7007.0800          |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

|   |                        |
|---|------------------------|
| E. REPORTING  | hdr                    |
| Each submission under the Acid Rain Program shall be submitted, signed, and certified by the designated representative for all sources on behalf of which the submission is made in accordance with 40 CFR Section 72.21. | 40 CFR Section 72.21   |
| If the unit has excess emissions, the designated representative shall submit a proposed offset plan in accordance with 40 CFR ' 72.9(e).  | 40 CFR Section 72.9(e) |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** EU 004 Coal Crusher Building**Associated Items:** CE 009 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
SV 004

| What to do   | Why to do it   |
|--|--|
| If exhaust gases from any enclosed coal handling facility exceed 20 percent opacity, then the owner or operator of such facility shall select and implement one of the following further controls:<br>(1) install exhaust air system and control exhaust gases so that particulate emissions in such gases do not exceed 0.020 gr/dscf;<br>(2) control exhaust gases using dust suppression methods so that particulate emissions do not exhibit greater than 20 percent opacity. Also note additional PM limit based on Minn. R. 7009.0020. | Minn. R. 7011.1105 (G)   |
| Total Particulate Matter: less than or equal to 0.38 lbs/hour  | Title I Condition: 40 CFR 52.21 limited to less than significance level for PSD and meets Minn. R. 7009.0020 |
| Check for visible emissions (during daylight hours) from the control equipment (CE009) once each calendar week during every week of operation of the emission unit.  | Minn. R. 7007.0800, subp. 4  |
| Corrective Actions: If visible emissions (VEs) are observed, determine the cause and take corrective actions as soon as possible to eliminate the VEs.   | Minn. R. 7007.0800, subp. 2  |
| Recordkeeping: Record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, also record a brief description of the type of corrective actions taken, and the date the actions were taken.   | Minn. R. 7007.0800, subp. 5  |



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** EU 005 900 + 2400 Bunker Rooms**Associated Items:** CE 006 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
SV 005

| What to do   | Why to do it                                |
|--|---|
| If exhaust gases from any enclosed coal handling facility exceed 20 percent opacity, then the owner or operator of such facility shall select and implement one of the following further controls:<br>(1) install exhaust air system and control exhaust gases so that particulate emissions in such gases do not exceed 0.020 gr/dscf;<br>(2) control exhaust gases using dust suppression methods so that particulate emissions do not exhibit greater than 20 percent opacity. Also note additional PM limit based on Minn. R. 7009.0020. | Minn. R. 7011.1105 (G) and 40 CFR 60.252(c) |
| Total Particulate Matter: less than or equal to 0.88 lbs/hour  | Minn. R. 7009.0020                          |
| Check for visible emissions (during daylight hours) from the control equipment (CE006) once each calendar week during every week of operation of the emission unit.  | Minn. R. 7007.0800, subp. 4                 |
| Corrective Actions: If visible emissions (VEs) are observed, determine the cause and take corrective actions as soon as possible to eliminate the VEs.   | Minn. R. 7007.0800, subp. 2                 |
| Recordkeeping: Record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, also record a brief description of the type of corrective actions taken, and the date the actions were taken.   | Minn. R. 7007.0800, subp. 5                 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** EU 006 Rail Car Unloading - Coal Conveying**Associated Items:** CE 007 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
SV 006

| What to do   | Why to do it                                |
|--|---|
| If exhaust gases from any enclosed coal handling facility exceed 20 percent opacity, then the owner or operator of such facility shall select and implement one of the following further controls:<br>(1) install exhaust air system and control exhaust gases so that particulate emissions in such gases do not exceed 0.020 gr/dscf;<br>(2) control exhaust gases using dust suppression methods so that particulate emissions do not exhibit greater than 20 percent opacity. Also note additional PM limit based on Minn. R. 7009.0020. | Minn. R. 7011.1105 (G) and 40 CFR 60.252(c) |
| Total Particulate Matter: less than or equal to 0.88 lbs/hour  | Minn. R. 7009.0020                          |
| Check for visible emissions (during daylight hours) from the control equipment (CE007) once each calendar week during every week of operation of the emission unit.  | Minn. R. 7007.0800, subp. 4                 |
| Corrective Actions: If visible emissions (VEs) are observed, determine the cause and take corrective actions as soon as possible to eliminate the VEs.   | Minn. R. 7007.0800, subp. 2                 |
| Recordkeeping: Record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, also record a brief description of the type of corrective actions taken, and the date the actions were taken.   | Minn. R. 7007.0800, subp. 5                 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** EU 007 Rail Car Unloading Building - Coal Unloading**Associated Items:** CE 008 Fabric Filter - Low Temperature, i.e., T<180 Degrees F  
SV 007

| What to do  | Why to do it                               |
|---|--|
| Railcar Unloading: When the amount of coal unloaded by rail is 200,000 tons per year or greater, unload railcars only within a permanent building or structure. If exhaust gases from such building or structure exceed 20 percent opacity, then implement one of the following further controls: install an exhaust air system and control exhaust gases so that particulate matter emissions do not exceed 0.020 gr/dscf; or control exhaust gases using dust suppression methods so that particulate emissions exhibit Opacity: less than or equal to 20 percent opacity | Minn. R. 7011.1105(H) and 40 CFR 60.252(c) |
| Total Particulate Matter: less than or equal to 1.15 lbs/hour   | Minn. R. 7009.0020                         |
| Check for visible emissions (during daylight hours) from SV002 and SV003 (for CE008) once each calendar week during every week of operation of the emission unit.   | Minn. R. 7007.0800, subp. 4                |
| Corrective Actions: If visible emissions (VEs) are observed, determine the cause and take corrective actions as soon as possible to eliminate the VEs.  | Minn. R. 7007.0800, subp. 2                |
| Record keeping: Record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, also record a brief description of the type of corrective actions taken, and the date the actions were taken.   | Minn. R. 7007.0800, subp. 5                |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** EU 008 6/7 Fly Ash Bin**Associated Items:** CE 002 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 001

SV 002

| What to do   | Why to do it                   |
|--|--------------------------------|
| Total Particulate Matter: less than or equal to 0.1 grains/dry standard cubic foot | Minn. R. 7011.0715, subp. 1(A) |
| Opacity: less than or equal to 20 percent opacity                                  | Minn. R. 7011.0715, subp. 1(B) |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** EU 009 Unit 8 Fly Ash Bin**Associated Items:** CE 005 Electrostatic Precipitator - High Efficiency  
SV 003

| What to do   | Why to do it                   |
|--|--------------------------------|
| Total Particulate Matter: less than or equal to 0.1 grains/dry standard cubic foot | Minn. R. 7011.0715, subp. 1(A) |
| Opacity: less than or equal to 20 percent opacity                                  | Minn. R. 7011.0715, subp. 1(B) |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** EU 010 Emergency Engine Generator EEG - 61001**Associated Items:** GP 001 Emergency Generators

SV 008

| What to do   | Why to do it                |
|--|-----------------------------|
| Opacity: less than or equal to 20 percent opacity once operating temperatures have been obtained.                              | Minn. R. 7011.2300, subp. 1 |
| Sulfur Dioxide: less than or equal to 1.75 lbs/million Btu heat input  | Minn. R. 7011.2300, subp. 2 |
| Fuel type is limited to distillate fuel oil with a maximum Sulfur Content of Fuel: less than or equal to 0.5 percent by weight | Minn. R. 7007.0800, subp. 2 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** EU 011 Emergency Engine Generator EEG - 61002**Associated Items:** GP 001 Emergency Generators

SV 009

| What to do   | Why to do it                |
|--|-----------------------------|
| Opacity: less than or equal to 20 percent opacity once operating temperatures have been obtained.                              | Minn. R. 7011.2300, subp. 1 |
| Sulfur Dioxide: less than or equal to 1.75 lbs/million Btu heat input  | Minn. R. 7011.2300, subp. 2 |
| Fuel type is limited to distillate fuel oil with a maximum Sulfur Content of Fuel: less than or equal to 0.5 percent by weight | Minn. R. 7007.0800, subp. 2 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** EU 014 Coal Crusher Conveyors**Associated Items:** SV 012

| What to do   | Why to do it   |
|--|--|
| If exhaust gases from any enclosed coal handling facility exceed 20 percent opacity, then the owner or operator of such facility shall select and implement one of the following further controls:<br>(1) install exhaust air system and control exhaust gases so that particulate emissions in such gases do not exceed 0.020 gr/dscf;<br>(2) control exhaust gases using dust suppression methods so that particulate emissions do not exhibit greater than 20 percent opacity. Also note additional PM limit based on Minn. R. 7009.0020. | Minn. R. 7011.1105 (G)   |
| Total Particulate Matter: less than or equal to 0.88 lbs/hour  | Title I Condition: 40 CFR 52.21 limited to less than significance level for PSD and meets Minn. R. 7009.0020 |
| Check for visible emissions (during daylight hours) from the control equipment (CE009) once each calendar week during every week of operation of the emission unit.  | Minn. R. 7007.0800, subp. 4  |
| Corrective Actions: If visible emissions (VEs) are observed, determine the cause and take corrective actions as soon as possible to eliminate the VEs.   | Minn. R. 7007.0800, subp. 2  |
| Recordkeeping: Record the time and date of each VE inspection, and whether or not any VEs were observed. If VEs were observed, also record a brief description of the type of corrective actions taken, and the date the actions were taken.   | Minn. R. 7007.0800, subp. 5  |



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** CE 001 Gas Scrubber (General, Not Classified)**Associated Items:** EU 001 Boiler 6

EU 002 Boiler 7

| What to do   | Why to do it                |
|--|-----------------------------|
| Record Keeping: Maintain records of all periods of operation. If unit is not in an operable status, make an initial reference to that fact in the records. | Minn. R. 7007.0800, subp. 5 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** CE 002 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 001 Boiler 6

EU 002 Boiler 7

EU 008 6/7 Fly Ash Bin

| What to do   | Why to do it                |
|--|-----------------------------|
| Operate control equipment when the associated boiler is operating except while burning only natural gas. | Minn. R. 7007.0800, subp. 2 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** CE 003 Electrostatic Precipitator - High Efficiency**Associated Items:** EU 003 Boiler 8

| What to do   | Why to do it                |
|--|-----------------------------|
| Operate control equipment when the associated boiler is operating except while burning only natural gas. | Minn. R. 7007.0800, subp. 2 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** CE 004 Electrostatic Precipitator - High Efficiency**Associated Items:** EU 003 Boiler 8

| What to do   | Why to do it                |
|--|-----------------------------|
| Operate control equipment when the associated boiler is operating except while burning only natural gas. | Minn. R. 7007.0800, subp. 2 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** CE 005 Electrostatic Precipitator - High Efficiency**Associated Items:** EU 003 Boiler 8

EU 009 Unit 8 Fly Ash Bin

| What to do   | Why to do it                |
|--|-----------------------------|
| Operate control equipment when the associated boiler is operating except while burning only natural gas and during startup. When this precipitator reaches a temperature of 260 degrees Fahrenheit, it shall be placed in service. | Minn. R. 7007.0800, subp. 2 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** CE 006 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 005 900 + 2400 Bunker Rooms

| What to do   | Why to do it                |
|--|-----------------------------|
| Control of Enclosed Areas: This dust collector system draws from enclosed areas and therefore is not required to be in operation unless the enclosed areas are being vented to the atmosphere. | Minn. R. 7007.0800, subp. 2 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** CE 007 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 006 Rail Car Unloading - Coal Conveying

| What to do   | Why to do it                |
|--|-----------------------------|
| Control of Enclosed Areas: This dust collector system draws from enclosed areas and therefore is not required to be in operation unless the enclosed areas are being vented to the atmosphere. | Minn. R. 7007.0800, subp. 2 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** CE 008 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 007 Rail Car Unloading Building - Coal Unloading

| What to do   | Why to do it                |
|--|-----------------------------|
| Control of Enclosed Areas: This dust collector system draws from enclosed areas and therefore is not required to be in operation unless the enclosed areas are being vented to the atmosphere. | Minn. R. 7007.0800, subp. 2 |



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** CE 009 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 004 Coal Crusher Building

| What to do   | Why to do it                |
|--|-----------------------------|
| Control of Enclosed Areas: This dust collector system draws from enclosed areas and therefore is not required to be in operation unless the enclosed areas are being vented to the atmosphere. | Minn. R. 7007.0800, subp. 2 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item: CE 014 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**

| What to do   | Why to do it                |
|--|-----------------------------|
| Control of Enclosed Areas: This dust collector system draws from enclosed areas and therefore is not required to be in operation unless the enclosed areas are being vented to the atmosphere. | Minn. R. 7007.0800, subp. 2 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** FS 001 Rail Car Unload Building Doors**Associated Items:** CE 011 Other

| What to do  | Why to do it           |
|---|------------------------|
| Railcar Unloading: When the amount of coal unloaded by rail is 200,000 tons per year or greater, unload railcars only within a permanent building or structure. If exhaust gases from such building or structure exceed 20 percent opacity, then implement one of the following further controls: install an exhaust air system and control exhaust gases so that particulate matter emissions do not exceed 0.020 gr/dscf; or control exhaust gases using dust suppression methods so that particulate emissions exhibit Opacity: less than or equal to 20 percent | Minn. R. 7011.1105 (H) |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** FS 002 Outstack Hopper Loadout**Associated Items:** CE 010 Dust Suppression by Water Spray

| What to do   | Why to do it          |
|--|-----------------------|
| Coal Loading Stations: Control fugitive particulate emissions from the loading of trucks or haulers by dust suppression methods so that emissions from such sources are minimized. | Minn. R. 7011.1105(B) |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** FS 003 Outstack Hopper Loading**Associated Items:** CE 013 Dust Suppression by Water Spray

| What to do   | Why to do it          |
|--|-----------------------|
| Coal Loading Stations: Control fugitive particulate emissions from the loading of trucks or haulers by dust suppression methods so that emissions from such sources are minimized. | Minn. R. 7011.1105(B) |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** FS 004 Coal Stockpile Placement**Associated Items:** CE 010 Dust Suppression by Water Spray

| What to do  | Why to do it          |
|---|-----------------------|
| Stockpiles, Stockpile Construction, and Reclaiming: (1) Control fugitive particulate emissions by dust suppression methods on such operations so that fugitive particulate emissions are minimized. | Minn. R. 7011.1105(F) |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** FS 005 Coal Stockpile - Wind Erosion**Associated Items:** CE 010 Dust Suppression by Water Spray

| What to do  | Why to do it          |
|---|-----------------------|
| Stockpiles, Stockpile Construction, and Reclaiming: (1) Control fugitive particulate emissions by dust suppression methods on such operations so that fugitive particulate emissions are minimized. | Minn. R. 7011.1105(F) |
| Coal Pile Storage: The total storage capacity of the coal piles shall not exceed 200,000 tons.  | Minn. R. 7009.0020    |
| Record daily the material storage inventory each day the inventory changes.   | Minn. R. 7007.0800    |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** FS 006 Coal Stockpile Reclaim**Associated Items:** CE 010 Dust Suppression by Water Spray

| What to do  | Why to do it          |
|---|-----------------------|
| Stockpiles, Stockpile Construction, and Reclaiming: (1) Control fugitive particulate emissions by dust suppression methods on such operations so that fugitive particulate emissions are minimized. | Minn. R. 7011.1105(F) |



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside  
Permit Number: 05300015 - 002

**Subject Item: FS 007 Petroleum Coke Unload**

| What to do  | Why to do it           |
|---|------------------------|
| Stockpiles, Stockpile Construction, and Reclaiming: (1) Control fugitive particulate emissions by dust suppression methods on such operations so that fugitive particulate emissions are minimized. | Minn. R. 7011.1105 (F) |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** FS 008 Petroleum Coke Stockpile - Wind Erosion**Associated Items:** CE 010 Dust Suppression by Water Spray

| What to do  | Why to do it          |
|---|-----------------------|
| Stockpiles, Stockpile Construction, and Reclaiming: (1) Control fugitive particulate emissions by dust suppression methods on such operations so that fugitive particulate emissions are minimized. | Minn. R. 7011.1105(F) |
| Coke Pile Storage: The total storage capacity of the coke piles shall not exceed 3,000 tons.  | Minn. R. 7009.0020    |
| Record daily the material storage inventory each day the inventory changes.   | Minn. R. 7007.0800    |

TABLE A: LIMITS AND OTHER REQUIREMENTS

06/26/00

Facility Name: NSP - Riverside  
Permit Number: 05300015 - 002

Subject Item: FS 009 Petroleum Coke Reclaim

Associated Items: CE 010 Dust Suppression by Water Spray

| What to do  | Why to do it          |
|---|-----------------------|
| Stockpiles, Stockpile Construction, and Reclaiming: (1) Control fugitive particulate emissions by dust suppression methods on such operations so that fugitive particulate emissions are minimized. | Minn. R. 7011.1105(F) |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside  
Permit Number: 05300015 - 002

**Subject Item:** FS 010 Coal Yard Traffic  
**Associated Items:** CE 010 Dust Suppression by Water Spray

| What to do  | Why to do it          |
|---|-----------------------|
| No person shall cause or permit the use of access areas surrounding coal stockpiles and use of all active truck haul roads and parking facilities which are located within a coal handling facility whose coal throughput by truck is less than 200,000 tons unless such areas and roads are treated with water, oils or chemical agents. | Minn. R. 7011.1105(A) |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** FS 011 Unit 8 Fly Ash Loadout**Associated Items:** CE 012 Dust Suppression by Water Spray

| What to do  | Why to do it       |
|---|--------------------|
| No person shall 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. | Minn. R. 7011.0150 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** FS 012 Fly Ash Unloading (In Ash Transfer Bldg.)**Associated Items:** CE 011 Other

| What to do  | Why to do it       |
|---|--------------------|
| No person shall 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. | Minn. R. 7011.0150 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item: FS 013 Fly Ash Loading (Outside Ash Transfer Bldg.)**

| What to do  | Why to do it       |
|---|--------------------|
| No person shall 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. | Minn. R. 7011.0150 |

**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item:** FS 014 Unpaved Roads - Ash Hauling**Associated Items:** CE 010 Dust Suppression by Water Spray

| What to do  | Why to do it       |
|---|--------------------|
| No person shall 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. | Minn. R. 7011.0150 |



**TABLE A: LIMITS AND OTHER REQUIREMENTS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

**Subject Item: FS 015 Barge Unloading**

| <b>What to do</b>  | <b>Why to do it</b>         |
|--|-----------------------------|
| Solid fuel unloading by barge is allowed only if dispersion modeling for particulate matter includes this fugitive source and the modeling demonstrates that emissions from the source would not cause or contribute to a violation of ambient air quality standards in 40 CFR Section 50.6 or Minn. R. 7009.0080. | Minn. R. 7007.0800, subp. 2 |
| Barge or Vessel Unloading Station: Cranes, shovels, and conveyors shall be operated in a manner which decreases as much as possible the vertical free fall of coal. Control fugitive particulate emissions during unloading so that fugitive particulate emissions are minimized.                                  | Minn. R. 7011.1105 (E)      |

## TABLE B: SUBMITTALS

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 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**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

| What to send                                | When to send   | Portion of Facility Affected |
|---|--|------------------------------|
| Acid Rain Application for Permit Reissuance | due 180 days before expiration of Existing Permit  | EU001, EU002, EU003          |
| Application for Permit Reissuance           | due 180 days before expiration of Existing Permit  | Total Facility               |
| Fugitive Control Plan                       | due 90 days after Permit Issuance for review and approval by the Commissioner. The plan shall comply with Minn. R. 7011.1105 at a minimum, and shall be consistent with control measures used in calculating emissions in the most recent MPCA approved Air Quality Modeling Analysis performed for the plant. Those control measures shall include schedules/criteria and recordkeeping for: 1. watering of coal on the conveyor prior to dumping tho the outstacker tank or hauling to the coal pile, 2. watering of scraper roads, 3. wetting of ash, 4. watering of unpaved roads, 5. watering of storage piles. | Total Facility               |

**TABLE B: RECURRENT SUBMITTALS**

06/26/00

Facility Name: NSP - Riverside

Permit Number: 05300015 - 002

| What to send  | When to send   | Portion of Facility Affected |
|---|--|------------------------------|
| Acid Rain Program Electronically Submitted Quarterly Report | due 30 days after end of each calendar quarter starting 01/01/96   | SV001, SV002, SV003          |
| Excess Emissions/Downtime Reports (EER's)                   | due 30 days after end of each calendar quarter following Permit Issuance (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of exceedances of the limit for Opacity and SO <sub>2</sub> including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions. | SV001, SV002                 |
| Excess Emissions/Downtime Reports (EER's)                   | due 30 days after end of each calendar quarter following Permit Issuance (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of exceedances of the limit for Opacity and SO <sub>2</sub> including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions. | SV003                        |
| Deviations Report   | due 30 days after end of each calendar half-year following Permit Issuance (July 30th and January 30th). The first report covers January 1 - June 30. The second report covers July 1 - December 31.   | Total Facility               |
| Compliance Certification Report (Acid Rain Program)         | due 60 days after end of each calendar year starting 01/01/2000. The designated representative shall submit an annual compliance certification report for the unit in accordance with 40 CFR Section 72.90(a). The report shall include all information required by 40 CFR Section 72.90(b) and (c).                                   | EU001                        |
| Compliance Certification Report (Acid Rain Program)         | due 60 days after end of each calendar year starting 01/01/2000. The designated representative shall submit an annual compliance certification report for the unit in accordance with 40 CFR Section 72.90(a). The report shall include all information required by 40 CFR Section 72.90(b) and (c).                                   | EU002                        |
| Compliance Certification Report (Acid Rain Program)         | due 60 days after end of each calendar year starting 01/01/2000. The designated representative shall submit an annual compliance certification report for the unit in accordance with 40 CFR Section 72.90(a). The report shall include all information required by 40 CFR Section 72.90(b) and (c).                                   | EU003                        |
| Compliance Certification                                    | due 30 days after end of each calendar year following Permit Issuance (January 30th).  | Total Facility               |
| Emissions Inventory Report                                  | due 91 days after end of each calendar year following Permit Issuance (April 1). To be submitted on a form approved by the Commissioner.   | Total Facility               |

## APPENDIX MATERIAL

Facility Name: NSP - Riverside

Permit Number: 05300015-002

# Phase II NO<sub>x</sub> Compliance Plan

For more information, see instructions and refer to 40 CFR 76.9

This submission is:

☒

New

☐

Revised

|  |                             |                 |                       |
|--|-----------------------------|-----------------|-----------------------|
| <b>Step 1</b><br><b>Indicate plant name, State, and ORIS code from NADB, if applicable</b> | Riverside<br><br>Plant Name | MN<br><br>State | 1927<br><br>ORIS Code |
|--|-----------------------------|-----------------|-----------------------|

**Step 2** Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: “CB” for cell burner, “CY” for cyclone, “DBW” for dry bottom wall-fired, “T” for tangentially fired, “V” for vertically fired, and “WB” for wet bottom. Indicate the compliance option selected for each unit

|       |       |       |      |      |      |
|-------|-------|-------|------|------|------|
|       |       |       |      |      |      |
| ID# 6 | ID# 7 | ID# 8 | ID#  | ID#  | ID#  |
| DBW   | DBW   | CY    |      |      |      |
| Type  | Type  | Type  | Type | Type | Type |

|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
| (a) Standard annual average emission limitation of 0.50 lb/mmBtu (for <u>Phase I</u> dry bottom wall-fired boilers)            |  |  |  |  |  |  |
| (b) Standard annual average emission limitation of 0.45 lb/mmBtu (for <u>Phase I</u> tangentially fired boilers)               |  |  |  |  |  |  |
| (c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan) |  |  |  |  |  |  |
| (d) Standard annual average emission limitation of 0.46 lb/mmBtu (for <u>Phase II</u> dry bottom wall-fired boilers)           |  |  |  |  |  |  |
| (e) Standard annual average emission limitation of 0.40 lb/mmBtu (for <u>Phase II</u> tangentially fired boilers)              |  |  |  |  |  |  |

|  |   |   |   |  |  |  |
|--|---|---|---|--|--|--|
| <b>(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)</b>  |   |   |   |  |  |  |
| <b>(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)</b>  |   |   |   |  |  |  |
| <b>(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)</b>   |   |   |   |  |  |  |
| <b>(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)</b>   |   |   |   |  |  |  |
| <b>(j) NO<sub>x</sub> Averaging Plan (include NO<sub>x</sub> Averaging form)</b>   | X | X | X |  |  |  |
| <b>(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)</b> |   |   |   |  |  |  |
| <b>(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO<sub>x</sub> Averaging (check the NO<sub>x</sub> Averaging Plan box and include NO<sub>x</sub> Averaging form)</b>   |   |   |   |  |  |  |
| <b>(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)</b>   |   |   |   |  |  |  |
| <b>(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)</b>   |   |   |   |  |  |  |
| <b>(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing</b>   |   |   |   |  |  |  |
| <b>(p) Repowering extension plan approved or under review</b>  |   |   |   |  |  |  |

#### Standard Requirements

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)).

These requirements are listed in this source's Acid Rain Permit.

#### Special Provisions for Early Election Units

Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub> as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).

Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

# Phase II NOx Averaging Plan

For more information, see instructions and refer to 40 CFR 76.11

This submission is:      New      ☐      ☒ Revised

## Step 1

Identify the units participating in this averaging plan by plant name, State, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation in lb/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 3 if necessary.

| Plant Name       | State | ID# | (a)<br>Emission<br>Limitation | (b)<br>Alt.<br>Contemp.<br>Emission<br>Limitation | (c)<br>Annual<br>Heat<br>Input<br>Limit |  |
|------------------|-------|-----|-------------------------------|---|---|--|
| Allen S. King    | MN    | 1   | 0.86                          | 1.05  | 34,000,000                              |  |
| Black Dog        | MN    | 1   | 0.40                          | 0.81  | 2,094,000                               |  |
| Black Dog        | MN    | 3   | 0.46                          | 0.81  | 5,685,000                               |  |
| Black Dog        | MN    | 4   | 0.46                          | 0.81  | 11,036,000                              |  |
| High Bridge      | MN    | 3   | 0.50                          | 0.60  | 1,771,500                               |  |
| High Bridge      | MN    | 4   | 0.50                          | 0.60  | 1,771,500                               |  |
| High Bridge      | MN    | 5   | 0.50                          | 0.60  | 5,037,000                               |  |
| High Bridge      | MN    | 6   | 0.50                          | 0.60  | 10,313,000                              |  |
| Minnesota Valley | MN    | 4   | 0.46                          | 0.47  | 1,189,000                               |  |
| Riverside        | MN    | 6   | 0.46                          | 0.85  | 4,324,500                               |  |
| Riverside        | MN    | 7   | 0.46                          | 0.85  | 4,324,500                               |  |
| Riverside        | MN    | 8   | 0.86                          | 0.82  | 10,821,000                              |  |
| Sherburne County | MN    | 1   | 0.45                          | 0.28  | 42,255,000                              |  |
| Sherburne County | MN    | 2   | 0.45                          | 0.28  | 42,255,000                              |  |
| Sherburne County | MN    | 3   | 0.46                          | 0.35  | 34,912,000                              |  |

## Step 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Btu-weighted annual emission rate  
averaged over the units if they are  
operated in accordance with the  
proposed averaging plan

Btu-weighted annual average  
emission rate for same units  
operated in compliance with  
40 CFR 76.5, 76.6, or 76.7



0.54

0.54

$$\frac{\sum_{i=1}^n (R_{Li} \times HI_i)}{\sum_{i=1}^n HI_i} \leq \frac{\sum_{i=1}^n [R_{li} \times HI_i]}{\sum_{i=1}^n HI_i}$$

Where,

$R_{Li}$  = Alternative contemporaneous annual emission limitation unit i, in lb/mmBtu, as specified in column (b) of Step 1:

$R_{li}$  = Applicable emission limitation for unit i, in lb/mmBtu, as specified in column (a) of Step 1:

$HI_i$  = Annual heat input for unit i, in mmBtu, as specified in column (c) of Step 1:

$n$  = Number of units in the averaging plan

☒ This plan is effective for calendar year 2000 through calendar year 2004 unless notification to terminate the plan is given.

☐ Treat this plan as ☐ identical plans, each effective for one calendar year for the following calendar years       ,       ,       ,       , and        unless notification to terminate one or more of these plans is given.

Special Provisions

#### Emission Limitations

Each affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for NO<sub>x</sub> under the plan only if the following requirements are met:

(i) For each unit, the unit's actual annual average emission rate for the calendar year, in lb/mmBtu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan, and

(a) For each unit with an alternative contemporaneous emission limitation less stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year does not exceed the annual heat input limit in the averaging plan,

(b) For each unit with an alternative contemporaneous emission limitation more stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan, or

(ii) If one or more of the units does not meet the requirements of (i), the designated representative shall demonstrate, in accordance with 40 CFR 76.11(d)(1)(ii)(A) and (B), that the actual Btu-weighted annual average emission rate for the units in the plan is less than or equal to the Btu-weighted annual average rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7.

(iii) If there is a successful group showing of compliance under 40 CFR 76.11(d)(1)(ii)(A) and (B) for a calendar year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under (i).

#### Liability

The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.

#### Termination

The designated representative may submit a notification to terminate an approved averaging plan, in accordance with 40 CFR 72.40(d), no later than October 1 of the calendar year for which the plan is to be terminated.

# Phase II Permit Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31

This submission is New

☒

Revised

☐

|            |       |           |
|------------|-------|-----------|
| Riverside  | MN    | 1927      |
| Plant Name | State | ORIS Code |

## Compliance Plan

| a<br>Boiler ID# | b<br>Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1) | c<br>Repowering Plan | d<br>New Units<br><br>Commence Operation Date | e<br>New Units<br><br>Monitor Certification Deadline |
|-----------------|---|----------------------|---|--|
| 6               | Yes   | no                   |   |  |
| 7               | Yes   | no                   |   |  |
| 8               | Yes   | no                   |   |  |
|                 | Yes   |                      |   |  |
|                 | Yes   |                      |   |  |
|                 | Yes   |                      |   |  |
|                 | Yes   |                      |   |  |
|                 | Yes   |                      |   |  |
|                 | Yes   |                      |   |  |
|                 | Yes   |                      |   |  |
|                 | Yes   |                      |   |  |

Standard Requirements

Permit Requirements.

(1) The designated representative of each affected source and each affected unit at the source shall:

- (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
- (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
  - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
  - (ii) Have an Acid Rain Permit.

#### Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR parts 74, 75, and 76.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR parts 74 and 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

#### Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each affected unit at the source shall:
  - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
  - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
  - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
  - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

**Nitrogen Oxides Requirements.** The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

#### Excess Emissions Requirements.

- (1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
  - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
  - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

#### Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
  - (ii) All emissions monitoring information, in accordance with 40 CFR part 75;

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

#### Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.

(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.

(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.

(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.

(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO<sub>x</sub> averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.

(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities. No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

June 26, 2000

Ms. Nancy Stafki, Senior Environmental Analyst  
Northern States Power Company- Riverside  
414 Nicollet Mall  
Minneapolis, MN 55401-1993

RE: Administrative Amendment to your Title V Permit

Dear Ms. Nancy Stafki:

The Minnesota Pollution Control Agency (MPCA) has administratively amended your Title V Air Emission Permit. The purpose of amending your permit was to allow the MPCA to streamline the tracking of your Performance Test (PT) and/or Continuous Monitoring System (CMS) requirements.

This administrative amendment does not change your facility's permit requirements. The amendment only changes whether or not the MPCA tracks particular PT/CMS requirements in its Delta database. Prior to the permit amendment, the MPCA tracked all of your PT/CMS requirements in its database (e.g. date of test notification; date of test plan submittal; date of pre-test meeting; date of test; and date of test report submittal). The MPCA will now track fewer requirements in Delta, although all submittals and actions will still be subject to timeliness and content review. The visible effect on your permit is that certain PT and/or CMS requirements have been moved from Table B to Table A of the permit.

Please review the enclosed copy of your amended permit. If you have any questions, please contact the MPCA Customer Assistance Center at (651) 282-5844.

Sincerely,

Carolina Espejel-Schutt, P.E.  
Supervisor, Sector 2  
Major Facilities Section  
Metro District

CES/HH:lao

Enclosure

cc: Robert Miller, EPA Region V (w/attachments)  
AQ File No. 202A (w/attachments)