

**AIR EMISSION PERMIT NO. 12300012- 002
IS ISSUED TO**

NORTHERN STATES POWER COMPANY

NSP - HIGH BRIDGE GENE
501 Shepard Road
St. Paul, Ramsey County, Minnesota 551023004

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	12/30/97

This permit authorizes the Permittee to operate the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit 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	Major Amendment
Issue Date:	July 20, 1998	Issue Date: March 5, 1999
Expiration:	July 20, 2003	

All Title I Conditions do not expire.

Michael J. Sandusky
Division Manager
Air Quality Division

for Karen A. Studders
Commissioner
Minnesota Pollution Control Agency

DKZ:lao

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NOTICE TO THE PERMITTEE:

Your stationary source may be subject to the requirements of the Minnesota Pollution Control Agency's (MPCA) solid waste, hazardous waste, and water quality programs. If you wish to obtain information on these programs, including information on obtaining any required permits, please contact the MPCA general information number at:

Metro Area	(612) 296-6300
Outside Metro Area	1-800-657-3864
TTY	(612) 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.

The permit shield, however does not apply to:

1. **The state noise pollution control rules, Minn. R. ch. 7030.**

FACILITY DESCRIPTION:

The NSP High Bridge facility has a total plant electrical output rating of 325 MW. the plant also supplies steam to an off-site customer. All four boilers at the facility are wall fired dry bottom coal fired boilers and discharge emissions to the atmosphere through a common 570 foot stack. Boiler Nos. 3 and 4 each have a maximum rated heat input capacity of 587 MMBtu/hr while Boiler 5 is rated at 1050 MMBtu/hr and Boiler 6 is rated at 1591 MMBtu/hr. Steam for electric power generation is provided solely by Boiler Nos. 5 and 6 while Boiler Nos. 3 and 4 only supply steam for off-site sale. In addition to the four boilers, the plant also operates and maintains various coal and ash handling and storage facilities. Emissions of particulate matter from the main boilers are controlled by electrostatic precipitators which removes particulates from the stack gases by electrically charging the particles at the inlet and then collecting them on oppositely charge plates at the outlet. Gaseous emissions from the main boilers are not effectively controlled by any post combustion control device at this time.

The focus of this amendment is the addition of the Nitrogen Oxides (NO_x) requirements to the Phase II Acid Rain portion of the Title V operating permit. The requirements state that the power boilers 1, 2, 3, and 4 shall limit NO_x emissions in a manner consistent with the NO_x averaging plan referenced in the permit. A few administrative changes were made to the permit to bring it current with the latest rule change. The administrative changes consist of wording amendments to the opacity language for each boiler subject to only the state opacity rule.

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 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

What to do	Why to do it
A. OPERATIONAL REQUIREMENTS	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: (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 (if required) 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; 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
B. POLLUTION CONTROL EQUIPMENT REQUIREMENTS	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)
C. TESTING REQUIREMENTS	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
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.	Minn. R. 7017.2025
This requirement does not apply to EU 003, and EU 004. For operating limit requirements applicable to EU 003, and EU 004, see requirements pertaining to Short Term Emergency and Testing (STET) and Boiler Operating Conditions in EU 003, and EU 004.	
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. MONITORING REQUIREMENTS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

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.	Minn. R. 7007.0800, subp. 4(D)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
E. RECORD KEEPING	hdr
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.	Minn. R. 7007. 0800, subp. 5(B)
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).	Minn. R. 7007.0800, subp. 5(C)
Operation and Maintenance Plan: Retain at the stationary source an operation and maintenance plan for all air pollution control equipment.	Minn. R. 7007.0800, subp. 14 and Minn. R. 7007.0800, subp. 16(J)
F. REPORTING	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. Notification is not required for breakdown of electrostatic precipitator sections in CE 001, CE 002, CE 003, CE 004, CE 005, CE 006, CE 007, and CE 008, if the number of remaining operating sections for each electrostatic precipitator is equal to or greater than the number of operating sections during the most recent performance test during which limits for particulate matter and opacity were met, and, the opacity measured by the COM on SV 001 does not exceed the opacity limit in EU 001, EU 002, EU 003, and EU 004. 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)

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: GP 001 Emergency Generators**Associated Items:** EU 010 Emergency Diesel Generator

EU 011 Emergency Diesel Generator

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

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: SV 001

Associated Items: EU 001 Boiler 3
EU 002 Boiler 4
EU 003 Boiler 5
EU 004 Boiler 6
MR 001
MR 002
MR 003
MR 004
MR 005
MR 006

What to do	Why to do it
A. EMISSION LIMITS	hdr
Sulfur Dioxide: less than or equal to 7439 lbs/hour using 1-Hour Average	Minn. R. 7009.0020
Particulate Matter < 10 micron: less than or equal to 1526 lbs/hour	Minn. R. 7009.0020
B. MONITORING REQUIREMENTS	hdr
Emissions Monitoring: The owner or operator shall use a CEMS to measure SO ₂ , NO _x , and CO ₂ emissions and flow rate for each affected unit in accordance with 40 CFR Section 75.10.	40 CFR pt. 75
Emissions Monitoring: The owner or operator shall use a COMS to measure opacity emissions from SV 001.	Minn. R. 7017.1000, subp. 1
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
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.	40 CFR pt. 75, Appendix B, Section 2.3
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.	40 CFR Section 75.21
COMS Continuous Operation: Except for system breakdowns, repairs, calibration checks and zero and span adjustments, all COMS shall be in continuous operation.	Minn. R. 7007.0800, subp. 2
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. 7017.1000, subp. 5
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. 7007.0800, subp. 2
COMS Monitoring Data: Owners or operators of all COMS shall reduce all data to one (1) minute averages. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the one (1) minute averaging period.	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 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
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
D. REPORTING	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: SV 002**Associated Items:** EU 005 Railcar Unloading

What to do	Why to do it
Particulate Matter < 10 micron: less than or equal to 2.0 lbs/hour	Minn. R. 7009.0020

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: SV 003**Associated Items:** EU 005 Railcar Unloading

What to do	Why to do it
Particulate Matter < 10 micron: less than or equal to 2.0 lbs/hour	Minn. R. 7009.0020

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: EU 001 Boiler 3

Associated Items: CE 001 Electrostatic Precipitator - High Efficiency

CE 002 Electrostatic Precipitator - High Efficiency

SV 001

What to do	Why to do it														
A. EMISSION LIMITS	hdr														
Sulfur Dioxide: less than or equal to 1.95 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														
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 that a maximum of 60 percent opacity shall be allowable for one six minute period in any 60-minute period.	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), 40 CFR Section 72.9(g)(4)														
<p>NOx Averaging Plan</p> <p>Beginning January 1, 2000 either:</p> <p>Maintain an annual average NOx emission rate of 0.60 lbs/MMBtu and limit the annual heat input to less than or equal to 1,771,500 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 NOx 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), 40 CFR Section 72.9(g)(4)														
Allowed fuel types: bituminous coal, subbituminous coal, distillate fuel oil, natural gas, used oil, non-hazardous spill clean-up materials, non-hazardous parts cleaning agents and non-hazardous boiler cleaning agents.	Minn. R. 7007.0800, subp. 2														
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 SO2 emission limit requirement in Minn. R. 7011.0510, subp. 1														
Combust used oil in accordance with used oil regulations in Minn. R. ch. 7045. Limit used oil combustion to 5% of total fuel mass input on an hourly basis.	Minn. R. 7007.0800, subp. 2; Minn. R. ch. 7045														
Boiler chemical cleaning waste limited to: 8.5 gpm per 100,000 lbs/hr steam flow, 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.	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														
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test	Minn. R. 7017.2030, subp. 4														
D. RECORD KEEPING	hdr														

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

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)
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

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: EU 002 Boiler 4

Associated Items: CE 003 Electrostatic Precipitator - High Efficiency

CE 004 Electrostatic Precipitator - High Efficiency

SV 001

What to do	Why to do it														
A. EMISSION LIMITS	hdr														
Sulfur Dioxide: less than or equal to 1.95 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														
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 that a maximum of 60 percent opacity shall be allowable for one six minute period in any 60-minute period.	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), 40 CFR Section 72.9(g)(4)														
<p>NOx Averaging Plan</p> <p>Beginning January 1, 2000 either:</p> <p>Maintain an annual average NOx emission rate of 0.60 lbs/MMBtu and limit the annual heat input to less than or equal to 1,771,500 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 NOx 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
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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), 40 CFR Section 72.9(g)(4)														
Allowed fuel types: bituminous coal, subbituminous coal, distillate fuel oil, natural gas, used oil, non-hazardous spill clean-up materials, non-hazardous parts cleaning agents and non-hazardous boiler cleaning agents.	Minn. R. 7007.0800, subp. 2														
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 SO2 emission limit requirement in Minn. R. 7011.0510, subp. 1														
Combust used oil in accordance with used oil regulations in Minn. R. ch. 7045. Limit used oil combustion to 5% of total fuel mass input on an hourly basis.	Minn. R. 7007.0800, subp. 2; Minn. R. ch. 7045														
Boiler chemical cleaning waste limited to: 8.5 gpm per 100,000 lbs/hr steam flow, 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.	Minn. R. 7007.0800, subp. 2														
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Initial Performance Test: due 180 days after Permit Issuance to measure particulate matter emissions.	Minn. R. 7017.2020, subp. 1														
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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

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: EU 003 Boiler 5

Associated Items: CE 005 Electrostatic Precipitator - High Efficiency

CE 006 Electrostatic Precipitator - High Efficiency

SV 001

What to do	Why to do it														
A. EMISSION LIMITS	hdr														
Sulfur Dioxide: less than or equal to 1.95 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														
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 that a maximum of 60 percent opacity shall be allowable for one six minute period in any 60-minute period.	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), 40 CFR Section 72.9(g)(4)														
<p>NOx Averaging Plan</p> <p>Beginning January 1, 2000 either:</p> <p>Maintain an annual average NOx emission rate of 0.60 lbs/MMBtu and limit the annual heat input to less than or equal to 5,037,000 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 NOx 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), 40 CFR Section 72.9(g)(4)														
Allowed fuel types: bituminous coal, subbituminous coal, distillate fuel oil, natural gas, used oil, non-hazardous spill clean-up materials, non-hazardous parts cleaning agents and non-hazardous boiler cleaning agents.	Minn. R. 7007.0800, subp. 2														
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 SO2 emission limit requirement in Minn. R. 7011.0510, subp. 1														
Combust used oil in accordance with used oil regulations in Minn. R. ch. 7045. Limit used oil combustion to 5% of total fuel mass input on an hourly basis.	Minn. R. 7007.0800, subp. 2; Minn. R. ch. 7045														
Boiler chemical cleaning waste limited to: 8.5 gpm per 100,000 lbs/hr steam flow, 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.	Minn. R. 7007.0800, subp. 2														
C. TESTING REQUIREMENTS	hdr														
Initial Performance Test: due before 12/31/99 or during the first planned shut down of the off-site steam lines (that serve EU 001 and EU 002), whichever comes first. Testing will be conducted to measure particulate matter emissions.	Minn. R. 7017.2020, subp. 1														
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test	Minn. R. 7017.2030, subp. 4														

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

<p>Boiler Alternative Operating Conditions for Performance Testing:</p> <p>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.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7007.0800, subp. 2
<p>Boiler Operating Conditions Not Meeting the Alternative Operating Conditions During Performance Testing:</p> <p>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:</p> <p>(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.</p> <p>(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.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7007.0800, subp. 2
<p>STET (Short Term Emergency and Testing) Operating Hours Limit:</p> <p>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.</p>	Minn. R. 7007.0800, subp. 2
<p>STET Operation Definition that applies to Boilers that Meet or do Not Meet the Alternative Operating Conditions for Performance Testing:</p> <p>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.</p> <p>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.</p> <p>In no case will STET operation be higher than allowed by an existing permit condition.</p>	Minn. R. 7007.0800, subp. 2
<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
D. RECORD KEEPING	hdr
<p>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.</p>	40 CFR Section 72.9(f)(l)
E. REPORTING	hdr
<p>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.</p>	40 CFR Section 72.21
<p>If the unit has excess emissions, the designated representative shall submit a proposed offset plan in accordance with 40 CFR ' 72.9(e).</p>	40 CFR Section 72.9(e)

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: EU 004 Boiler 6

Associated Items: CE 007 Electrostatic Precipitator - High Efficiency

CE 008 Electrostatic Precipitator - High Efficiency

SV 001

What to do	Why to do it														
A. EMISSION LIMITS	hdr														
Sulfur Dioxide: less than or equal to 1.95 lbs/million Btu heat input using 1-Hour Average	Minn. R. 7011.0510, subp. 1; meets requirements of Minn. R. 7009.0020 and 40 CFR Section 50.6														
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 that a maximum of 60 percent opacity shall be allowable for one six minute period in any 60-minute period.	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), 40 CFR Section 72.9(g)(4)														
<p>NOx Averaging Plan</p> <p>Beginning January 1, 2000 either:</p> <p>Maintain an annual average NOx emission rate of 0.60 lbs/MMBtu and limit the annual heat input to less than or equal to 10,313,000 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 NOx 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 LIMITS	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), 40 CFR Section 72.9(g)(4)														
Allowed fuel types: bituminous coal, subbituminous coal, distillate fuel oil, natural gas, used oil, non-hazardous spill clean-up materials, non-hazardous parts cleaning agents and non-hazardous boiler cleaning agents.	Minn. R. 7007.0800, subp. 2														
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 SO2 emission limit requirement in Minn. R. 7011.0510, subp. 1														
Combust used oil in accordance with used oil regulations in Minn. R. ch. 7045. Limit used oil combustion to 5% of total fuel mass input on an hourly basis.	Minn. R. 7007.0800, subp. 2; Minn. R. ch. 7045														
Boiler chemical cleaning waste limited to: 8.5 gpm per 100,000 lbs/hr steam flow, 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.	Minn. R. 7007.0800, subp. 2														
C. TESTING REQUIREMENTS	hdr														
Initial Performance Test: due before 12/31/99 or during the first planned shut down of the off-site steam lines (that serve EU 001 and EU 002), whichever comes first. Testing will be conducted to measure particulate matter emissions.	Minn. R. 7017.2020, subp. 1														
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test	Minn. R. 7017.2030, subp. 4														

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

<p>Boiler Alternative Operating Conditions for Performance Testing:</p> <p>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.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7007.0800, subp. 2
<p>Boiler Operating Conditions Not Meeting the Alternative Operating Conditions During Performance Testing:</p> <p>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:</p> <p>(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.</p> <p>(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.</p> <p>In no case will the new operating rate limit be higher than allowed by an existing permit condition.</p>	Minn. R. 7007.0800, subp. 2
<p>STET (Short Term Emergency and Testing) Operating Hours Limit:</p> <p>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.</p>	Minn. R. 7007.0800, subp. 2
<p>STET Operation Definition that applies to Boilers that Meet or do Not Meet the Alternative Operating Conditions for Performance Testing:</p> <p>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.</p> <p>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.</p> <p>In no case will STET operation be higher than allowed by an existing permit condition.</p>	Minn. R. 7007.0800, subp. 2
<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
<p>D. RECORD KEEPING</p>	hdr
<p>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.</p>	40 CFR Section 72.9(f)(l)
<p>E. REPORTING</p>	hdr
<p>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.</p>	40 CFR Section 72.21
<p>If the unit has excess emissions, the designated representative shall submit a proposed offset plan in accordance with 40 CFR ' 72.9(e).</p>	40 CFR Section 72.9(e)

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

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

SV 002

SV 003

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 do not exhibit Opacity: greater than or equal to 20 percent opacity	Minn. R. 7011.1105 (H)
Check for visible emissions (during daylight hours) from SV002 and SV003 (for CE009) once each calendar week during every week of operation.	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

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: EU 006 #5 Feeder Area (Weightometer)**Associated Items:** CE 010 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: (1) install exhaust air system and control exhaust gases so that particulate emissions in such gases do not exceed 0.020 gr/dscf; (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)
Particulate Matter < 10 micron: less than or equal to 1.8 lbs/hour	Minn. R. 7009.0020
Operating Hours: less than or equal to 12 hours/day	Minn. R. 7009.0020
Check for visible emissions (during daylight hours) from the control equipment (CE010) once each calendar week during every week of operation.	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 operating start and stop times during every day of coal throughput operation.	Minn. R. 7007.0800, subp. 5
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

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: EU 007 Bunker Room Conveying**Associated Items:** CE 011 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: (1) install exhaust air system and control exhaust gases so that particulate emissions in such gases do not exceed 0.020 gr/dscf; (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)
Particulate Matter < 10 micron: less than or equal to 2.7 lbs/hour	Minn. R. 7009.0020
Check for visible emissions (during daylight hours) from the control equipment (CE011) once each calendar week during every week of operation.	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

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: EU 008 Fly Ash Transfer System**Associated Items:** CE 012 Fabric Filter - Low Temperature, i.e., T<180 Degrees F
SV 006

What to do	Why to do it
Particulate Matter < 10 micron: less than or equal to 0.02 grains/dry standard cubic foot and 0.4 lbs/hr.	Minn. R. 7009.0020 and meets requirement of Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Check for visible emissions (during daylight hours) from the control equipment (CE012) once each calendar week during every week of operation.	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

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: EU 009 Fly Ash Silo**Associated Items:** CE 013 Fabric Filter - Low Temperature, i.e., T<180 Degrees F
SV 007

What to do	Why to do it
Particulate Matter < 10 micron: less than or equal to 0.02 grains/dry standard cubic foot and 0.2 lbs/hr.	Minn. R. 7009.0020 and meets requirement of Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Check for visible emissions (during daylight hours) from the control equipment (CE012) once each calendar week during every week of operation.	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

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: EU 010 Emergency Diesel Generator**Associated Items:** GP 001 Emergency Generators

SV 008

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity for more than 10 consecutive seconds once operating temperatures have been obtained.	Minn. R. 7011.2300, subp. 1
Particulate Matter < 10 micron: less than or equal to 0.8 lbs/hour	Minn. R. 7009.0020
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

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: EU 011 Emergency Diesel Generator**Associated Items:** GP 001 Emergency Generators

SV 009

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity for more than 10 consecutive seconds once operating temperatures have been obtained.	Minn. R. 7011.2300, subp. 1
Particulate Matter < 10 micron: less than or equal to 0.8 lbs/hour	Minn. R. 7009.0020
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

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: EU 012 Temporary Emergency Engine**Associated Items:** SV 010

What to do	Why to do it
Operating Hours: less than or equal to 7575 hours/year using 12-month Rolling Sum calculated monthly. During the first 11 months of operation, the cumulative operating hours are limited as follows: Month 1: 730 hours; Month 2: 1460 hours; Month 3: 2190 hours; Month 4: 2920 hours; Month 5: 3650 hours; Month 6: 4380 hours; Month 7: 5110 hours; Month 8: 5840 hours; Month 9: 6570 hours; Month 10: 7300 hours; Month 11: 7475 hours.	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21
Capacity: less than or equal to 300 horsepower	Minn. R. 7007.0800, subp. 2
Particulate Matter < 10 micron: less than or equal to 0.66 lbs/hour	Minn. R. 7009.0020
Opacity: less than or equal to 20 percent opacity for more than 10 consecutive seconds once operating temperatures have been obtained.	Minn. R. 7011.2300, subp. 1
Sulfur Content of Fuel: less than or equal to 0.5 percent by weight	Minn. R. 7007.0800, subp. 2; meets requirements of Minn. R. 7011.2300, subp. 2
Calculate and record operating hours for each month and on a 12-month rolling sum basis. Complete the calculation and recording by the end of each month, for the previous month and for 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

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: CE 001 Electrostatic Precipitator - High Efficiency**Associated Items:** EU 001 Boiler 3

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
The ESP must be operated with at least the minimum specific collection area (SCA) in service determined during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit. If the sections in the ESP are physically and electrically equivalent, the Permittee can meet this requirement by operating the ESP with no less than the number of sections that were operating during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit.	Minn. R. 7007.0800, subp. 14
Monitor and record the identity and minimum number of ESP sections (or SCA if sections are not equivalent) in service each day that the ESP is operating.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: CE 002 Electrostatic Precipitator - High Efficiency**Associated Items:** EU 001 Boiler 3

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
The ESP must be operated with at least the minimum specific collection area (SCA) in service determined during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit. If the sections in the ESP are physically and electrically equivalent, the Permittee can meet this requirement by operating the ESP with no less than the number of sections that were operating during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit.	Minn. R. 7007.0800, subp. 14
Monitor and record the identity and minimum number of ESP sections (or SCA if sections are not equivalent) in service each day that the ESP is operating.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: CE 003 Electrostatic Precipitator - High Efficiency**Associated Items:** EU 002 Boiler 4

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
The ESP must be operated with at least the minimum specific collection area (SCA) in service determined during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit. If the sections in the ESP are physically and electrically equivalent, the Permittee can meet this requirement by operating the ESP with no less than the number of sections that were operating during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit.	Minn. R. 7007.0800, subp. 14
Monitor and record the identity and minimum number of ESP sections (or SCA if sections are not equivalent) in service each day that the ESP is operating.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: CE 004 Electrostatic Precipitator - High Efficiency**Associated Items:** EU 002 Boiler 4

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
The ESP must be operated with at least the minimum specific collection area (SCA) in service determined during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit. If the sections in the ESP are physically and electrically equivalent, the Permittee can meet this requirement by operating the ESP with no less than the number of sections that were operating during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit.	Minn. R. 7007.0800, subp. 14
Monitor and record the identity and minimum number of ESP sections (or SCA if sections are not equivalent) in service each day that the ESP is operating.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: CE 005 Electrostatic Precipitator - High Efficiency**Associated Items:** EU 003 Boiler 5

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
The ESP must be operated with at least the minimum specific collection area (SCA) in service determined during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit. If the sections in the ESP are physically and electrically equivalent, the Permittee can meet this requirement by operating the ESP with no less than the number of sections that were operating during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit.	Minn. R. 7007.0800, subp. 14
Monitor and record the identity and minimum number of ESP sections (or SCA if sections are not equivalent) in service each day that the ESP is operating.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: CE 006 Electrostatic Precipitator - High Efficiency**Associated Items:** EU 003 Boiler 5

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
The ESP must be operated with at least the minimum specific collection area (SCA) in service determined during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit. If the sections in the ESP are physically and electrically equivalent, the Permittee can meet this requirement by operating the ESP with no less than the number of sections that were operating during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit.	Minn. R. 7007.0800, subp. 14
Monitor and record the identity and minimum number of ESP sections (or SCA if sections are not equivalent) in service each day that the ESP is operating.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: CE 007 Electrostatic Precipitator - High Efficiency**Associated Items:** EU 004 Boiler 6

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
The ESP must be operated with at least the minimum specific collection area (SCA) in service determined during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit. If the sections in the ESP are physically and electrically equivalent, the Permittee can meet this requirement by operating the ESP with no less than the number of sections that were operating during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit.	Minn. R. 7007.0800, subp. 14
Monitor and record the identity and minimum number of ESP sections (or SCA if sections are not equivalent) in service each day that the ESP is operating.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: CE 008 Electrostatic Precipitator - High Efficiency**Associated Items:** EU 004 Boiler 6

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
The ESP must be operated with at least the minimum specific collection area (SCA) in service determined during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit. If the sections in the ESP are physically and electrically equivalent, the Permittee can meet this requirement by operating the ESP with no less than the number of sections that were operating during the most-recent particulate matter emissions test with results equal to or less than the particulate matter emission limit.	Minn. R. 7007.0800, subp. 14
Monitor and record the identity and minimum number of ESP sections (or SCA if sections are not equivalent) in service each day that the ESP is operating.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene
Permit Number: 12300012 - 002

Subject Item: FS 002 PM10 Coal Yard Traffic

Associated Items: CE 014 Dust Suppression by Water Spray

What to do	Why to do it
Control dust by watering, achieving at least 40% control efficiency.	Minn. R. 7009.0020

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: FS 003 PM10 Coal Storage Pile - Erosion**Associated Items:** CE 014 Dust Suppression by Water Spray

What to do	Why to do it
Control dust by watering, achieving at least 40% control efficiency. Stockpiles, Stockpile Construction, and Reclaiming: (1) Control fugitive particulate emissions by dust suppression methods on such operations so that fugitive particulate emissions are minimized. Total Particulate Matter: less than or equal to 0.02 grains/dry standard cubic foot	Minn. R. 7011.1105(F) and Minn. R. 7009.0020
Coal Pile Area: The total exposed surface area of all coal piles shall be less than or equal to 7.5 acres or 190,000 tons.	Minn. R. 7009.0020

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: FS 004 PM10 Scraper Building Hopper

What to do	Why to do it
Control fugitive dust emissions by 50% through the use of a partial enclosure and an additional 40% through use of water sprays. 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. 7009.0020 and meets the requirements of Minn. R. 7011.1105(B)

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: FS 005 PM10 Coal Storage Pile - Placement**Associated Items:** CE 014 Dust Suppression by Water Spray

What to do	Why to do it
Control dust by watering, achieving at least 40% control efficiency. Stockpiles, Stockpile Construction, and Reclaiming: (1) Control fugitive particulate emissions by dust suppression methods on such operations so that fugitive particulate emissions are minimized. Total Particulate Matter: less than or equal to 0.02 grains/dry standard cubic foot	Minn. R. 7011.1105(F) and Minn. R. 7009.0020

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: FS 006 PM10 Coal Storage Pile - Reclaim**Associated Items:** CE 014 Dust Suppression by Water Spray

What to do	Why to do it
Control dust by watering, achieving at least 40% control efficiency. Stockpiles, Stockpile Construction, and Reclaiming: (1) Control fugitive particulate emissions by dust suppression methods on such operations so that fugitive particulate emissions are minimized. Total Particulate Matter: less than or equal to 0.02 grains/dry standard cubic foot	Minn. R. 7011.1105(F) and Minn. R. 7009.0020

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: FS 007 PM10 Coal Reclaim Hopper

What to do	Why to do it
Control fugitive dust emissions by 50% through the use of a partial enclosure. Coal Loading Stations: Control fugitive particulate emissions from the unloading of trucks or haulers by dust suppression methods so that emissions from such sources are minimized.	Minn. R. 7009.0020 and meets requirements of Minn. R. 7011.1105(F)

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene
Permit Number: 12300012 - 002

Subject Item: FS 008 PM10 Ash Hauling Traffic - Industrial Paved

Associated Items: CE 014 Dust Suppression by Water Spray

What to do	Why to do it
Control dust by watering, achieving at least 40% control efficiency.	Minn. R. 7009.0020

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene
Permit Number: 12300012 - 002

Subject Item: FS 010 PM10 Ash Hauling Traffic - Paved

What to do	Why to do it
Control dust by watering, achieving at least 40% control efficiency.	Minn. R. 7009.0020

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: FS 998 Barge Unloading**Associated Items:** CE 016 Dust Suppression by Water Spray

What to do	Why to do it
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
Control dust by watering, achieving at least 40% control efficiency. 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. Control emissions using water sprays.	Minn. R. 7011.1105 (E)

TABLE A: LIMITS AND OTHER REQUIREMENTS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 002

Subject Item: FS 999 Barge Euclid Loading

What to do	Why to do it
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
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 B: SUBMITTALS

03/05/99

Facility Name: NSP - High Bridge Gene
Permit Number: 12300012 - 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

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 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, EU004
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Computer Dispersion Modeling Protocol	due 1,096 days after Permit Issuance for NOx. This protocol will describe the proposed modeling methodology and input data, in accordance with all requirements of 40 CFR pt. 51, Appendix W. The protocol shall be based on projected operating conditions under the next permit term.	Total Facility
Computer Dispersion Modeling Protocol	due 30 days after Permit Issuance for PM-10. This protocol will describe the proposed modeling methodology and input data, in accordance with all requirements of 40 CFR pt. 51, Appendix W. The protocol shall be based on operating conditions under the current permit term.	Total Facility
Computer Dispersion Modeling Results	due 1,462 days after Permit Issuance . The results shall be submitted after the MPCA has reviewed and approved the modeling protocol.	Total Facility
Computer Dispersion Modeling Results	due 90 days after Permit Issuance . The results shall be submitted after the MPCA has reviewed and approved the modeling protocol.	Total Facility
Fugitive Control Plan	due 60 days after 07/20/1998 for review and approval by the Commissioner. The plan shall identify all fugitive emission sources, primary and contingent control measures, and recordkeeping(if required). Daily recordkeeping must include, at a minimum, results of fugitive dust emissions observations, relevant meteorological data, control measures taken, and the date and time when the observations or control measure took place.	Total Facility
Performance Test Notification (written)	due 30 days before Initial Performance Test	EU001, EU002, EU003, EU004
Performance Test Plan	due 30 days before Initial Performance Test	EU001, EU002, EU003, EU004
Performance Test Report - Microfiche Copy	due 105 days after Initial Performance Test	EU001, EU002, EU003, EU004
Performance Test Report	due 45 days after Initial Performance Test	EU001, EU002, EU003, EU004
Relative Accuracy Test Audit (RATA) Notification	due 30 days before CEMS Relative Accuracy Test Audit (RATA)	SV001
Testing Frequency Plan	due 60 days after Initial Performance Test for particulate matter emissions. The plan shall specify a testing frequency using the test data and MPCA guidance. Future performance tests based on year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required on written approval of MPCA per Minn. R. 7017.2020, subp. 1.	EU001, EU002, EU003, EU004

TABLE B: RECURRENT SUBMITTALS

03/05/99

Facility Name: NSP - High Bridge Gene

Permit Number: 12300012 - 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
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 ₂ including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions.	SV001
Linearity Test Results Summary	due 30 days after end of each calendar quarter following Linearity and Leak Check Test (Acid Rain Program) if performed.	SV001
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).	SV001
COMS Calibration Error Audit Results Summary	due 30 days after end of each calendar half-year following COMS Calibration Error Audit	SV001
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 following Permit Issuance . 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 following Permit Issuance . 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 following Permit Issuance . 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 Report (Acid Rain Program)	due 60 days after end of each calendar year following Permit Issuance . 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).	EU004
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 - High Bridge Gene

Permit Number: 12300012-002

Phase II NO_x Compliance Plan

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

This submission is:

☒

New

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Revised

Step 1 Indicate plant name, State, and ORIS code from NADB, if applicable	High Bridge	MN	1912
	Plant Name	State	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 tangetially fired, “V” for vertically fired, and “WB” for wet bottom. Indicate the compliance option selected for each unit

ID# 3	ID# 4	ID# 5	ID# 6	ID#	ID#
DBW	DBW	DBW	DBW		
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)						
(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)						
(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)						
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)						
(i) Standard annual						

average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)						
(j) NOx Averaging Plan (include NOx Averaging form)	X	X	X	X		
(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						
(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NOx Averaging (check the NOx Averaging Plan box and include NOx Averaging form)	X	X	X	X		
(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)						
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)						
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period						

ongoing						
(p) Repowering extension plan approved or under review						

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_x 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_x 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_x for Phase II units with Group 1 boilers under 40 CFR 76.7.

Phase II NO_x Averaging Plan

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

This submission is:

New

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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) Emission Limitation	(b) Alt. Contemp. Emission Limitation	(c) Annual Heat Input 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_x 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

High Bridge	MN	1912
Plant Name	State	ORIS Code

**Compliance
Plan**

a Boiler ID#	b Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	c Repowering Plan	d New Units Commence Operation Date	e New Units Monitor Certification Deadline
3	Yes	no		
4	Yes	no		
5	Yes	no		
6	Yes	no		
	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_x 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.

TECHNICAL SUPPORT DOCUMENT
For
AIR EMISSION PERMIT NO. 12300012-002

This Technical Support Document (TSD) is for all the interested parties of the permit. The purpose of this document is to set forth the legal and factual basis for the permit conditions, including references to the applicable statutory or regulatory provisions.

1. General Information

1.1. Applicant and Stationary Source Location:

Owner/Operator Address and Phone Number (list both if different)	Facility Address (SIC Code: 4911)
Northern States Power Company 414 Nicollet Mall Minneapolis, Minnesota 55401-1993	501 Shepard Road St. Paul Ramsey County

1.2. Description Of The Facility

The NSP High Bridge facility has a total plant electrical output rating of 325 Megawatt (MW). The plant also supplies steam to an off-site customer. All four boilers at the facility are wall fired dry bottom boilers and discharge emissions to the atmosphere through a common 570 foot stack. Boilers No. 3 and 4 each have a maximum rated heat input capacity of 587 MMBtu/hr while Boiler 5 is rated at 1050 MMBtu/hr and Boiler 6 is rated at 1591 MMBtu/hr. Steam for electric power generation is provided solely by Boilers 5 and 6 while boilers 3 and 4 only supply steam for off-site sale. Generally only one of the Boilers No. 3 or 4 are operated at any one time due to the limiting capacity of the steam line running to the off-site customer.

Fuel for the facility can come in many forms. Subbituminous coal is the primary fuel for all boilers but all boilers can burn bituminous coal, fuel oil, natural gas, used oil, and boiler chemical cleaning waste transferred to the breaker and either sent directly to the boiler coal bunkers or to the outstacking hopper which transfers the coal to scrapers which haul it the coal pile. The Coal is brought to the facility via railcars and unloaded into a hopper. From there it is scrapers also reclaim coal from the pile.

1.3 Description of the Activities Allowed By This Permit Action

The focus of this amendment is the addition of the Nitrogen Oxides (NO_x) requirements to the Phase II Acid Rain portion of the Title V operating permit. The requirements state that power boiler 1 shall limit NO_x emissions in a manner consistent with the NO_x averaging plan application (see attached). A few administrative changes were made to the permit to bring it current with the latest rule changes. The administrative changes consist of wording amendments to the Shutdown, Breakdown and Deviations Endangering Human Health language on the Total Facility pages and the opacity language for each boiler subject to only the state opacity rule.

1.4. Facility Emissions:

Emissions from this source are not directly effected by this amendment.

Table 1. Permit Action Classification

Classification (put x in appropriate box)	Major/Affected Source	*Synthetic Minor	*Minor
PSD (list pollutant)			
NAAR (list pollutant)			
Part 70 Permit Program (list pollutant)	X		

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

2. Regulatory and/or Statutory Basis

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

Regulatory Overview of Units Affected by the Modification

The purpose of this table is to give an overview of the new/modified sources of emissions and the applicable regulations and standards. It is not designed for the discussion of specific limits, unless they are unusual and need some explanation, nor is it for the discussion of compliance demonstration requirements. This information is obtainable from the permit, but this section provides users in the future with a quick overview of the modification and its effect on the permit.

Permit Action Number:

Date: 3/5/2004

Table 2. Regulatory Overview

*EU, GRP, or SV #	Applicable Regulations	**Comments
EU001	40 CFR § 76.11	NO _x averaging plan used to keep plan wide average emissions at or below the individual boiler emissions for the boilers in the plan.
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EU001	40 CFR § 76.11	NO _x averaging plan used to keep plan wide average emissions at or below the individual boiler emissions for the boilers in the plan.

* Insert the number that identifies the level the limit was set on.

** Comments column is for citations that need further explanation only. Most rows should not have any further explanation needed.

3. Technical Information

The NO_x averaging plan proposes alternative NO_x emission rates and annual heat inputs for Boilers 1 at the Alan S. King Plant, 1, 3, 4 at the Black Dog Plant, 3, 4, 5, 6 at the High Bridge Plant, 4 at the Minnesota Valley Plant, 6, 7, 8 at the Riverside plant and 1, 2, 3 at the Sherburne County plant. These emission rates and annual heat inputs are equivalent to the lb/MMBtu emission rate if all boilers were to meet their own Phase II NO_x emission rate at the proposed annual heat input.

4. Conclusion

Based on the information provided by Northern States Power, the MPCA has reasonable assurance that the proposed operation of the emission facility, as described in the Air Emission Permit No. 12300012-002, and this TSD, will not cause or contribute to a violation of applicable federal regulations and Minnesota Rules.

Staff Members on Permit Team: Daren Zigich

Attachment: CD-01 Forms
Phase II NO_x Compliance and Averaging Plan

Permit Action Number:
Date: 3/5/2004