AIR EMISSION PERMIT NO. 03700003- 003
(ADMINISTRATIVE AMENDMENT)
IS ISSUED TO

NORTHERN STATES POWER COMPANY
A Minnesota Corporation doing business as Xcel Energy

Black Dog Generating Plant
1400 Black Dog Road
Burnsville, Dakota County, MN 55337

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	November 6, 1995
Major Amendment	January 27, 2000
Administrative Amendment	January 30, 2002

This permit authorizes the Permittee to operate the stationary source at the address listed above unless otherwise noted in Table A. The Permittee must comply with all the conditions of the permit. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit are as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

Permit Type: Federal; PSD/NSR Major Amendment Administrative Amendment
Issue Date: 08/13/1998 1/12/2001 May 14, 2002
Expiration: 08/13/2003
All Title I Conditions do not expire.

Don Smith
Ann M. Foss
Manager
Major Facilities Section

for Karen A. Studders
Commissioner
Minnesota Pollution Control Agency

AMF/JSC:lh

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NOTICE TO THE PERMITTEE:

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

Metro Area	(651) 296-6300
Outside Metro Area	1-800-657-3864
TTY	(651) 282-5332

The rules governing these programs are contained in Minn. R. chs. 7000-7105. Written questions may be sent to: Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

Questions about this air emission permit or about air quality requirements can also be directed to the telephone numbers and address listed above.

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Certain requirements which have been determined not to apply are listed in Table A of this permit.

Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, not withstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

The Northern States Power Company's Black Dog facility has coal-fired boilers and combined cycle gas turbine.

AMENDMENT DESCRIPTION:

This permit amendment incorporates the Risk Management Program (40 CFR Part 68, Sec. 112(r) requirement in to the existing permit.

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

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

Subject Item: **Total Facility**

What to do	Why to do it
A. OPERATIONAL REQUIREMENTS NOTE: As of the date of issuance of this permit (permit action 002), EU001 (unit 1 boiler) and EU002 (unit 2 boiler) are no longer operated. Unit 1 boiler will be completely removed to provide space for the heat recovery steam generator for EU026 (combustion turbine) and Unit 2 boiler will be partially dismantled and retired from service in place. The removal of the unit 1 boiler and retirement of the unit 2 boiler will be complete by May 1, 2001.	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 record keeping (if applicable) 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 and 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
Install: due 180 days after 08/13/1998 . Install a fence or other agency approved barrier to limit public access to facility property. The location of barrier shall be determined by latest air dispersion modeling analysis.	Minn. R. 7009.0020
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 Test: Conduct all performance tests in accordance with Minn. R. ch. 7017, unless otherwise noted in Tables A, B, or C.	Minn. R. ch. 7017

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: NSP - Black Dog

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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 tests, conducted 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. 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.	Minn. R. 7017.2025
D. MONITORING REQUIREMENTS	hdr
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)
Monitoring Activities and Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring of a process or of control equipment connected to that process, is not required during periods when the process is shutdown, including during system breakdowns, repairs, calibration checks, and zero and span adjustments (as applicable). Where applicable, monitoring records shall reflect any such periods of process shutdown.	Minn. R. 7007.0800, subp. 4(D)
Monitoring Equipment Calibration: Where applicable, annually calibrate all required monitoring equipment other than continous emission monitors (requirements applying to continuous emission monitors are listed separately in this permit), where applicable.	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 004, CE 005, CE 006, CE 007, CE 008, and CE 009, 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 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

TABLE A: LIMITS AND OTHER REQUIREMENTS

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Facility Name: NSP - Black Dog

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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 you need a permit amendment, submit 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)
Emissions Inventory Report: due 91 days after end of each calender year following permit issuance (April 1). To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3010
The Permittee is required to submit a Risk Management Plan (RMP) under the federal rule, 40 CFR pt. 68. Each owner or operator of a stationary source, at which a regulated substance is present above a threshold quantity in a process, shall design and implement an accidental release prevention program. A complete RMP must be submitted to the RMP Reporting Center, PO Box 3346, Merrifield, VA 22116. RMP submittal information may be obtained at http://www.epa.gov/swercepp or by calling 1-800-424-9346. These requirements must be complied with no later than the latest of the following dates: (1) June 21, 1999; (2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or (3) The date on which a regulated substance is first present above a threshold quantity in a process.	40 CFR pt. 68

TABLE A: LIMITS AND OTHER REQUIREMENTS

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Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **GP 001 Emergency Generators**

Associated Items: EU 024 Emergency Engine Generator EEG-61001

EU 025 Emergency Engine Generator EEG-61002

What to do	Why to do it
Operating Hours: less than or equal to 816 hours/year using 12-month Rolling Sum calculated monthly.	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21
Calculate and record the monthly and the 12-month rolling sum operating hours for GP 001. Complete the calculation and recording by the end of each month, for the previous month and the previous 12-month period.	Title I Condition: recordkeeping to avoid classification as a major modification under 40 CFR Section 52.21; Minn. R. 7007.0800, subp. 5
Nitrogen Oxides: less than or equal to 35.3 tons/year	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **SV 001**

Associated Items: EU 001 Boiler 1 - retired, to be removed

EU 002 Boiler 2 - retired from service in place

EU 003 Boiler 3

EU 004 Boiler 4

EU 019 Units 3 and 4 Fly Ash Silo Vent

MR 003

MR 004

MR 005

MR 006

MR 007

What to do	Why to do it
A. EMISSION LIMITS	hdr
Sulfur Dioxide: less than or equal to 1.3 lbs/million Btu heat input using 1-Hour Average . This is a state only requirement and is not federally enforceable.	40 CFR Section 50.4; Minn. R. 7009.0020
Sulfur Dioxide: less than or equal to 3988 lbs/hour using 1-Hour Average . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020
Particulate Matter < 10 micron: less than or equal to 920 lbs/hour . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020
D. MONITORING REQUIREMENTS	hdr
Emissions Monitoring: The owner or operator shall use a CEMS to measure SO2, NOx, and CO2 emissions and flow rate for each affected unit or group of units 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. 7017.1006; 40 CFR Section 75
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 CEM Certification Test . 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 CEM Certification Test . Conduct a RATA on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B. If the RATA results indicate a relative accuracy of 7.5% or less, the next RATA is not required for twelve months.	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
CEMS and COMS Continuous Operation: Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all CEMS and COMS shall be in continuous operation.	Minn. R. 7017.1090
COMS Daily Calibration Drift (CD) Check: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) opacity at least once daily. The COMS must be adjusted whenever the calibration drift (CD) exceeds twice the specifications of PS-1 of 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1210; subp. 2
COMS Calibration Error Audit: due before end of each calendar half-year following COMS Certification Test . Conduct audits at least 3 months apart but no greater than 8 months apart.	Minn. R. 7017.1210, subp. 3
COMS Monitoring Data: Owners or operators of all COMS shall reduce all data to six (6) minute averages. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the six (6) minute averaging period.	Minn. R. 7017.1200, subp. 1, 2, & 3
E. RECORD KEEPING	hdr
Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five (5) years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7007.0800, subp. 5
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

TABLE A: LIMITS AND OTHER REQUIREMENTS

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Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **SV 015**

Associated Items: EU 020 No. 2 Fly Ash Storage Silo

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Particulate Matter < 10 micron: less than or equal to 2.0 lbs/hour . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0715, subp. 1(A)
Check for visible emissions (during daylight hours) from the control equipment (CE 012) 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

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Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **SV 020**

Associated Items: EU 026 Combustion Turbine

EU 027 Duct Firing Burners

MR 010

MR 011

What to do	Why to do it
EMISSION LIMITS *Averaging times are specified for those emission limits where compliance is demonstrated by a continuous emission monitor. For all other emission limits, compliance will be determined, and averaging time is dictated, by the appropriate test method. ** Startup shall not exceed: 1. 2 hours, if the steam turbine-generator was off-line for less than 12 hours. 2. 4 hours, if the steam turbine-generator was off-line for 12 to 60 hours. 3. 8 hours, if the steam turbine-generator was off-line for more than 60 hours. On-line operations of less than 1-hour duration shall be considered off-line for startup determination purposes. *** Shutdown shall not exceed 1 hour. **** Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.	hdr
Opacity: less than or equal to 20 percent using 6-minute Average except for one 6-minute period per hour of not more than 27 percent. Applies only when EU 027 is operating.	40 CFR Section 60.42a(b)
Nitrogen Oxides: less than or equal to 4.5 parts per million using 3-hour Average at 15% oxygen. This limit applies at all times under all operating conditions, except during startup, shutdown, malfunction and within 60 days after fuel is first fired in EU 026.	40 CFR Section 52.21 BACT Limit Also meets the limit set by 40 CFR Section 60.332 and 60.44a
Nitrogen Oxides: less than or equal to 305 tons/year using 12-month Rolling Sum . This limit applies at all times under all operating conditions.	40 CFR Section 52.21, to limit emissions increase to less than the PSD increment significant impact level
Carbon Monoxide: less than or equal to 25 parts per million using 3-hour Average at 15 % oxygen when EU 026 (combustion turbine) is operating at or above 1,400 MMBtu/hr (higher heating value) heat input over the same three hour block average, with EU 027 in operation.	40 CFR Section 52.21 BACT Limit
Carbon Monoxide: less than or equal to 18 parts per million using 3-hour Average at 15 % oxygen when EU026 (combustion turbine) is operating at or above 1400 million Btu per hour (higher heating value) heat input over the same three-hour block average when EU027 is NOT in operation.	40 CFR Section 52.21 BACT Limit
Operating Hours: less than or equal to 1500 hours/year using 12-month Rolling Sum for EU027 (duct burners)	40 CFR Section 52.21 BACT Limit
Carbon Monoxide: less than or equal to 400 tons/year using 12-month Rolling Sum . This limit applies at all times under all operating conditions, except during startup and shutdown.	40 CFR Section 52.21 BACT Limit
Particulate Matter < 10 micron: less than or equal to 29.4 lbs/hour . This limit applies at all times under all operating conditions, except during startup, shutdown, or malfunction.	40 CFR Section 52.21 BACT Limit
Volatile Organic Compounds: less than or equal to 0.0073 lbs/million Btu heat input when EU 026 (combustion turbine) is operating at or above 1,400 MMBtu/hr (higher heating value) heat input, with or without EU 027 in operation.	40 CFR Section 52.21 BACT Limit
Formaldehyde: less than or equal to 9.9 tons/year using 12-month Rolling Sum . This limit applies at all times under all operating conditions, except during startup and shutdown.	To limit potential single HAP emissions to less than the major source levels defined by 40 CFR Section 63, Subp. B
HAPs - Total: less than or equal to 24.9 tons/year using 12-month Rolling Sum . This limit applies at all times under all operating conditions, except during startup and shutdown.	To limit potential total HAPs emissions to less than the major source levels defined by 40 CFR Section 63, Subp. B
MONITORING REQUIREMENTS	hdr
Measure NOx, CO and CO2 or O2 emissions using in-stack monitors. The CO monitor shall be operated and maintained in accordance with Minn. R. 7017.1002 through 7017.1220 (and those portions of 40 CFR pt. 60, Appendix B and 40 CFR pt. 60, Appendix F referenced therein) unless an alternative is approved by the Agency. The NOx and CO2 or O2 monitor shall be operated and maintained in accordance with 40 CFR pt. 75, Subpart B and Minn. R. ch. 7017.	Minn. R. 7007.0800, subp. 4, Title I Condition: Monitoring of emissions to demonstrate compliance with the NOx and CO BACT limits, 40 CFR section 60.47a

Measure gross electrical output in megawatt-hours and flow of exhaust gases discharged to the atmosphere on a continuous basis in accordance with 40 CFR 60.47a(k)(1) and 60.47a(l), unless alternative monitoring is approved by the USEPA.	40 CFR Section 60.47a
Operating Load and Operating Conditions Monitoring: Continuously monitor, at the same frequency as the CO monitor sampling rate, and record the heat input (MMBtu/hr) for EU 026 and EU 027 by measuring the natural gas flow rate and multiplying by a HHV of 1020 btu/scf. Monitor and record the times and duration of any "off normal" operating condition (startup, shutdown, or malfunction) defined above. Record the start and stop time of all steam turbine-generator on-line and off-line operation.	Minn. R. 7007.0800, subp. 4, Title I Condition: Monitoring of emissions to demonstrate compliance with the NOx and CO BACT limits
Continuous Operation: CEMS must be operated and data recorded during all periods of emission unit operation including periods of emission unit start-up, shutdown, or malfunction except for periods of acceptable monitor downtime. This requirement applies whether or not a numerical emission limit applies during these periods. A CEMS must not be bypassed except in emergencies where failure to bypass would endanger human health, safety, or plant equipment. Acceptable monitor downtime is defined under Minn. R. 7017.1090, subp. 2.	Minn. R. 7017.1090, subp. 1
Monitor the fuel sulfur content in accordance with 40 CFR Section 60.334(b), unless alternative monitoring is approved by the USEPA.	40 CFR Section 60.334
Measure or calculate SO2, NOx, and CO2 emission rates for each affected unit in accordance with 40 CFR Section 75.	40 CFR Section 75.10
Each month, by the 15th of the month, calculate and record monthly nitrogen oxides and carbon monoxide emissions and the annual 12-month rolling sum. The rolling sum shall be calculated by adding the current month's emission totals with those for the previous 11 months.	Minn. R, 7007.0800, subp. 4, Title I Condition: Monitoring of emissions to demonstrate compliance with NOx and CO facility emissions cap.
Each month, by the 15th of the month, calculate and record monthly and annual 12 month rolling sum formaldehyde and total HAPs emissions using emission factors from the latest stack test results. Prior to emissions testing, and for HAPs that are not stack tested, emission factors from the latest AP-42 section addressing emissions from combustion turbines and gas fired boilers shall be used. After establishing emission factors for formaldehyde at four load levels, the factor (lbs/MMBtu) established for the gas turbine (EU 026) operating between one of the three test loads shall be used for all gas turbine operation below the next higher test load range (i.e. factor established at 30-40% load shall be used for all loads under 50% of full load). The combined (EU 026 and EU 027) emission factor established at 90-100% of full load shall be used for all operation, combined or not, greater than or equal to 90% of full load.	Minn. R, 7007.0800, subp. 4, Title I Condition: Monitoring of emissions to demonstrate compliance with formaldehyde and total HAPs emissions caps.
Each month, by the 15th of the month, calculate and record the monthly and 12-month rolling sum of operating hours for EU027.	Minn. R, 7007.0800, subp. 4, Title I Condition: Monitoring of EU027(duct burner) operating hours
The calculation and record keeping requirement listed above shall not apply to SV 020 if the agency approved performance test for formaldehyde emissions proves that the formaldehyde emission rate is less than or equal to 2.0 lbs/hr at all four test ranges.	Minn. R, 7007.0800, subp. 4, Title I Condition: Monitoring of emissions to demonstrate compliance with formaldehyde and total HAPs emissions caps.
REQUIREMENTS FOR CEMS	hdr
CEMS Certification Test: due in accordance with 40 CFR 75.4. Certify all CEMS required by the Acid Rain Program in accordance with 40 CFR 75, Appendix A. AND Not later than 90 days after the units commence commercial operation.	40 CFR Section 75.4(b)
CEMS Certification Test for CO Monitor: due within 90 days after the units commence commercial operation in accordance with 40 CFR 60 Appendix B, Performance Spec. 4 or 4A.	Minn. R. 7017.1050, subp. 1
CEM Certification Test Pretest Meeting: due 7 days before CEM Certification Test.	Minn. R. 7017.1060, subp. 3
Acid Rain CEMS QA/QC: The owner or operator of an affected facility shall operate, calibrate, and maintain each CEMS according to the procedures in 40 CFR pt. 75, Appendix B as amended.	40 CFR Section 75.21
CO CEMS QA Plan: Develop and implement a written quality assurance plan that covers each CEMS. The plan shall be on site and available for inspection within 30 days after monitor certification. The plan shall contain all of the information required by 40 CFR 60, Appendix F, section 3. Owner or operator may make a request, to the MPCA, for an alternative plan format.	Minn. R. 7017.1170, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

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Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

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
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) gas concentration at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR 60, Appendix B. 40 CFR 60, Appendix F, shall be used to determine out-of-control periods for CEMS. Owner or operator may make a request, to the MPCA, for an alternative test procedure.	Minn. R.7017.1170, subp. 3
Linearity and Leak Check Test (Acid Rain Program): due before end of each calendar quarter following CEM Certification Test. Conduct a quarterly linearity test 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 2.2
CEMS Cylinder Gas Audit (CGA): due before end of each calendar half-year following CEM Certification Test. Conduct CGA for the CO monitor only at least 3 months apart and not greater than 8 months apart. If a RATA is performed during the calendar half-year the CGA is not required. Follow the procedures in 40 CFR 60, Appendix F. Owner or operator may make a request, to the MPCA, for an alternative audit procedure.	Minn. R. 7017.1170, subp. 4
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar half-year following CEM Certification Test. Conduct a RATA on all CEMS required by the Acid Rain Program, in accordance with 40 CFR pt. 75, Appendix B. If the RATA results indicate a relative accuracy of 7.5% or less, then the next RATA is not required for twelve months.	40 CFR pt. 75, Appendix B, Section 2.3
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test. Follow the procedures in 40 CFR 60, Appendix B and Appendix F. Owner or operator may make a request, to the MPCA, for an alternative test procedure.	Minn. R. 7017.1170, subp. 5
PERFORMANCE TESTING	hdr
Initial Performance Test: due 180 days after Initial Startup (fuel first fired), but not to exceed 60 days after achieving the maximum production rate at which the affected facility wil be operated, to measure opacity, PM-10, nitrogen oxides and sulfur dioxide in accordance with the procedures specified in 40 CFR 60, Subp. GG and 40 CFR 60 Subp. Da as appropriate.	Title I Condition: Minn. R. 7017.2020, subp. 1 and Minn. R. 7017.2030, subp. 4, 40 CFR 60.8: To demonstrate compliance with NOx, PM-10 and SO2 emission limits
Initial Performance Test: due 180 days after Initial Startup (fuel first fired), but not to exceed 60 days after achieving the maximum production rate at which the affected facility wil be operated, to measure CO, VOC and formaldehyde emissions and to develop emission factors for formaldehyde emissions from EU 026 and EU 027.	Title I Condition: Monitoring to demonstrate compliance with CO, VOC, single HAP (formaldehyde) and total HAPs emissions limits
Formaldehyde Emission Factor/Rate Testing: Emission factors and rates shall be determined by using Agency approved stack test methods at the following loads and operating conditions: All test shall be performed with the SCR system on line. 1. EU 026 operating at 30 to 40 percent of full load. 2. EU 026 operating at 50 to 60 percent of full load. 3. EU 026 operating at 70 to 80 percent of full load. 4. EU 026 and EU 027 combined operating at 90 to 100 percent of full load.	Minn. R. 7007.0800, subp. 4
Testing Frequency to Update Formaldehyde Emission Factors: Within 60 days of calculating 12-month rolling sum formaldehyde emissions of greater than 8.9 tons, perform a stack test to redevelop emission factors for formaldehyde emissions over the previously tested load ranges.	Minn. R. 7007.0800, subp. 4
RECORD KEEPING	hdr
Recordkeeping: Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the facility including malfunction of the air pollution control equipment or any periods during which a continuous monitoring system or monitoring device is inoperative.	Minn. R. 7007.0800, subp. 5
Recordkeeping: The owner or operator must retain records of all CEMS monitoring data and support information for a period of five years from the date of the monitoring sample, measurement or report. Records shall be kept at the source.	Minn. R. 7017.1130
SUBMITTALS AND REPORTS	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Excess emissions and monitoring system performance reports shall include the information required in 40 CFR Section 60.7(c) and (d), Section 60.49a and Section 60.334(c). MPCA supplied forms DRF-1 and DRF-2 may be used to meet this requirement.	Minn. R. 7007.0800, subp. 2 40 CFR Section 60.7, Section 60.49a and Section 60.334(c)
General Performance Test (PT) Requirements: Performance Tests are due as outlined in Tables A of the permit. PT Notifications (written): due 30 days before each Performance Test PT Plan: due 30 days before each Performance Test PT Pre-test Meeting: due 7 days before each Performance Test PT Report: due 45 days after each Performance Test PT Report-Microfiche: due 105 days after each Performance Test.	Minn. R. 7017.2030, subp. 1-4 and Minn. R. 7017.2035, subp. 1-2
Notification of any physical or operational change which may increase emissions, in accordance with 40 CFR 60.7 (a)(4). The notification shall be postmarked 60 days or as soon as practicable before the change is commenced.	40 CFR Section 60.7(a)(4)

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 003 Boiler 3**

Associated Items: CE 006 Electrostatic Precipitator - High Efficiency

CE 007 Electrostatic Precipitator - High Efficiency

SV 001

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 lbs/million Btu heat input	Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1
Sulfur Dioxide: less than or equal to 1.3 lbs/million Btu heat input using 1-Hour Average	Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1
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)(ii), 40 CFR Section 72.9 (g)(4)
NOx Averaging Plan Beginning January 1, 2000 either: Maintain an annual average NOx emission rate of 0.81 lbs/MMBtu and limit the annual heat input to less than or equal to 2,094,000 MMBtu per year. OR 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: 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
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, petroleum coke, distillate fuel oil, natural gas, propane, used oil, non-hazardous spill cleanup materials, 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 to 5% of total fuel mass 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. Cleaning waste shall be introduced into EU 003 when the boiler is operating at a minimum of 75 percent of rated capacity.	Minn. R. 7007.0800, subp. 2
C. TESTING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 12/31/93 to measure particulate matter emissions. The tests shall be conducted at an interval not to exceed 60 months between test dates.	Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before end of each 60 months starting 12/31/93 (7 days before each Performance Test)	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Boiler Alternative Operating Conditions for Performance Testing: Alternative Operating Conditions during testing are defined as 90% to 100% 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. In no case will the new operating rate limit be higher than allowed by an existing permit condition.	Minn. R. 7007.0800, subp. 2.
Boiler Operating Conditions Not Meeting the Alternative Operating Conditions During Performance Testing: 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: (1) If the results of the performance test are greater than 90% of any applicable emission limit for which emissions are measured, then boiler operation will be limited to the tested operating rate. (2) If results are less than or equal to 90% of all applicable emission limits for which emissions are measured, boiler operation will be limited to 110% of the tested operating rate. In no case will the new operating rate limit be higher than allowed by an existing permit condition.	Minn. R. 7007.0800, subp. 2.
STET (Short Term Emergency and Testing) Operating hours limit: The boiler may operate up to 40 hours per year to demonstrate the Uniform Rating of Generating Equipment (URGE) capacity and to meet emergency energy supply needs. Documentation of all STET operation shall be maintained. The boiler must meet emission limits during STET operation	Minn. R. 7007.0800, subp. 2.
STET Operation Definition that applies to Boilers that Meet or do Not Meet the Alternative Operating Condition for Performance Testing: If performance test results measure emissions at 90% or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110% of the average operating rate achieved during that performance test. If performance test results measure emissions at greater than 90% any applicable emission limit for any tested pollutant, STET operation is defined as operation beyond 100% of the average operating rate achieved during that performance test. In no case will STET operation be higher than allowed by an existing permit condition.	Minn. R. 7007.0800, subp. 2.
The results of a performance test are not final until issuance of a review letter by MPCA, unless specified otherwise by Minn. R. 7017.2001 - 7017.2060.	Minn. R. 7017.2020, subp. 4
D. RECORD KEEPING	hdr
Record keeping of Boiler Cleaning Agent incineration: the permittee shall keep records for all cleaning agent incineration including date of incineration, quantity (gallons), origin of cleaning agent, cleaning agent feed rate (in gallons per hour), and operating capacity of the boiler during incineration in lbs. of steam per hour.	Minn. R. 7007.0800, subp. 5
Keep on site at the source each of the following documents for a period of 5 years from the date of permit issuance: 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)(1)
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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 004 Boiler 4**

Associated Items: CE 008 Electrostatic Precipitator - High Efficiency

CE 009 Electrostatic Precipitator - High Efficiency

SV 001

What to do	Why to do it
A. EMISSION LIMITS	hdr
Total Particulate Matter: less than or equal to 0.3 lbs/million Btu heat input	Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1
Sulfur Dioxide: less than or equal to 1.3 lbs/million Btu heat input using 1-Hour Average	Minn. R. 7009.0020; meets requirements of Minn. R. 7011.0510, subp. 1
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)(ii), 40 CFR Section 72.9 (g)(4)
NOx Averaging Plan Beginning January 1, 2000 either: Maintain an annual average NOx emission rate of 0.81 lbs/MMBtu and limit the annual heat input to less than or equal to 2,094,000 MMBtu per year. OR 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: 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
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, petroleum coke, distillate fuel oil, natural gas, propane, used oil, non-hazardous spill cleanup materials, 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 to 5% of total fuel mass 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. Cleaning waste shall be introduced into EU 004 when the boiler is operating at a minimum of 75 percent of rated capacity.	Minn. R. 7007.0800, subp. 2
C. TESTING REQUIREMENTS	hdr
Performance Test: due before end of each 60 months starting 12/31/93 to measure particulate matter emissions. The tests shall be conducted at an interval not to exceed 60 months between test dates.	Minn. R. 7017.2020, subp. 1
Performance Test Pre-test Meeting: due 7 days before end of each 60 months starting 12/31/93 (7 days before each Performance Test)	Minn. R. 7017.2030, subp. 4

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Boiler Alternative Operating Conditions for Performance Testing: Alternative Operating Conditions during testing are defined as 90% to 100% 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. In no case will the new operating rate limit be higher than allowed by an existing permit condition.	Minn. R. 7007.0800, subp. 2.
Boiler Operating Conditions Not Meeting the Alternative Operating Conditions During Performance Testing: 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: (1) If the results of the performance test are greater than 90% of any applicable emission limit for which emissions are measured, then boiler operation will be limited to the tested operating rate. (2) If results are less than or equal to 90% of all applicable emission limits for which emissions are measured, boiler operation will be limited to 110% of the tested operating rate. In no case will the new operating rate limit be higher than allowed by an existing permit condition.	Minn. R. 7007.0800, subp. 2.
STET (Short Term Emergency and Testing) Operating hours limit: The boiler may operate up to 40 hours per year to demonstrate the Uniform Rating of Generating Equipment (URGE) capacity and to meet emergency energy supply needs. Documentation of all STET operation shall be maintained. The boiler must meet emission limits during STET operation	Minn. R. 7007.0800, subp. 2.
STET Operation Definition that applies to Boilers that Meet or do Not Meet the Alternative Operating Condition for Performance Testing: If performance test results measure emissions at 90% or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110% of the average operating rate achieved during that performance test. If performance test results measure emissions at greater than 90% any applicable emission limit for any tested pollutant, STET operation is defined as operation beyond 100% of the average operating rate achieved during that performance test. In no case will STET operation be higher than allowed by an existing permit condition.	Minn. R. 7007.0800, subp. 2.
The results of a performance test are not final until issuance of a review letter by MPCA, unless specified otherwise by Minn. R. 7017.2001 - 7017.2060.	Minn. R. 7017.2020, subp. 4
D. RECORD KEEPING	hdr
Record keeping of Boiler Cleaning Agent incineration: the permittee shall keep records for all cleaning agent incineration including date of incineration, quantity (gallons), origin of cleaning agent, cleaning agent feed rate (in gallons per hour), and operating capacity of the boiler during incineration in lbs. of steam per hour.	Minn. R. 7007.0800, subp. 5
Keep on site at the source each of the following documents for a period of 5 years from the date of permit issuance: 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)(1)
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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 005 200 Ton Stacking Hopper**

Associated Items: CE 025 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 031 Other

SV 002

What to do	Why to do it
Particulate Matter < 10 micron: less than or equal to 0.6 lbs/hour . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020
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 Opacity: greater than or equal to 20 percent opacity	Minn. R. 7011.1105 (G) and to meet Minn. R. 7009.0020
Check for visible emissions (during daylight hours) from the control equipment (CE 025) 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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 006 Dumper Unloading Bldg**

Associated Items: CE 023 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

CE 024 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 003

What to do	Why to do it
Particulate Matter < 10 micron: less than or equal to 1.0 lbs/hour . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020
Operating Hours: less than or equal to 12.5 hours/day . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020
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 suppresion methods so that particulate emissions do not exhibit Opacity: greater than or equal to 20 percent opacity	Minn. R. 7011.1105 (H)
Truck and Hauler Unloading Stations: Control fugitive particulate emissions from the unloading of truck or haulers by dust suppression methods so that emissions from such sources are minimized. Control emissions by unloading reclaimed coal within a partial enclosure and with fabric filters.	Minn. R. 7011.1105 (C)
Check for visible emissions (during daylight hours) from SV 003 (for CE 023 and CE 024) 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 train dumping 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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 007 Yard Agglomerator Silo**

Associated Items: CE 021 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 004

What to do	Why to do it
Opacity: less than 20 percent opacity	40 CFR Section 60.252(c)
Particulate Matter < 10 micron: less than or equal to 0.01 grains/actual cubic foot . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020 and to meet Minn. R. 7011.1105 (G)
Check for visible emissions (during daylight hours) from the control equipment (CE 021) 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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 008 Breaker Building (Coal Conveying; DC-951**

Associated Items: CE 019 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 005

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.1105 (G)
Particulate Matter < 10 micron: less than or equal to 0.005 grains/dry standard cubic foot . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020 and to meet Minn. R. 7011.1105 (G)
Check for visible emissions (during daylight hours) from the control equipment (CE 019) 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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 009 Transfer Tower (DC-952)**

Associated Items: CE 020 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 006

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.1105 (G)
Particulate Matter < 10 micron: less than or equal to 0.005 grains/dry standard cubic foot . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020; meets requirements of Minn. R. 7011.1105 (G)
Check for visible emissions (during daylight hours) from the SV 006 control equipment (CE 020) 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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 010 Breakers (Crushing: DC-952)**

Associated Items: CE 020 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 006

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.1105 (G)
Particulate Matter < 10 micron: less than or equal to 0.005 grains/dry standard cubic foot . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020; meets requirements of Minn. R. 7011.1105 (G)
Check for visible emissions (during daylight hours) from the SV 006 control equipment (CE 020) 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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 011 Tripper Area (Conveyors D and F; DC-961**

Associated Items: CE 016 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 007

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.1105 (G)
Particulate Matter < 10 micron: less than or equal to 0.005 grains/dry standard cubic foot . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020 and to meet Minn. R. 7011.1105 (G)
Check for visible emissions (during daylight hours) from the control equipment (CE 016) 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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 012 Coal Silos DC-962**

Associated Items: CE 017 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 008

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.1105 (G)
Particulate Matter < 10 micron: less than or equal to 0.005 grains/dry standard cubic foot . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020 and to meet Minn. R. 7011.1105 (G)
Check for visible emissions (during daylight hours) from the control equipment (CE 017) 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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 013 Unit 4 Coal Silo DC-963**

Associated Items: CE 018 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 009

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.1105 (G)
Particulate Matter < 10 micron: less than or equal to 0.005 grains/dry standard cubic foot . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020 and to meet Minn. R. 7011.1105 (G)
Check for visible emissions (during daylight hours) from the control equipment (CE 018) 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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 018 Units 3 and 4 Secondary Precip. Fly Ash Collection System Venting**

Associated Items: CE 011 Centrifugal Collector - High Efficiency

CE 015 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 014

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Particulate Matter < 10 micron: less than or equal to 0.02 grains/dry standard cubic foot . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020 and to meet Minn. R. 7011.0715, subp. 1(A)
Check for visible emissions (during daylight hours) from the control equipment (CE 015) 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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 019 Units 3 and 4 Fly Ash Silo Vent**

Associated Items: CE 004 Electrostatic Precipitator - High Efficiency

CE 005 Electrostatic Precipitator - High Efficiency

CE 006 Electrostatic Precipitator - High Efficiency

CE 007 Electrostatic Precipitator - High Efficiency

CE 008 Electrostatic Precipitator - High Efficiency

CE 009 Electrostatic Precipitator - High Efficiency

SV 001

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Particulate Matter < 10 micron: less than or equal to 0.02 grains/dry standard cubic foot . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020 and meets the requirements of Minn. R. 7011.0715, subp. 1(A)
Units 3 and 4 ash silo vent emissions are controlled by CE 004, 005, 006, 007, 008, and 009 and exhaust through SV 001.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 021 No. 2 Fly Ash Collection System**

Associated Items: CE 010 Centrifugal Collector - High Efficiency

CE 013 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 016

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Particulate Matter < 10 micron: less than or equal to 0.02 grains/dry standard cubic foot . This is a state only requirement and is not federally enforceable.	Minn. R. 7009.0020 and to meet Minn. R. 7011.0715, subp. 1(A)
Check for visible emissions (during daylight hours) from the control equipment (CE 013) 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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 023 Temporary Emergency Engine**

Associated Items: SV 017

What to do	Why to do it
Operating Hours: less than or equal to 5000 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: 500 hours; Month 2: 1000 hours; Month 3: 1500 hours; Month 4: 2000 hours; Month 5: 2500 hours; Month 6: 3000 hours; Month 7: 3400 hours; Month 8: 3800 hours; Month 9: 4200 hours; Month 10: 4600 hours; Month 11: 4900 hours.	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21; and meets 7009.0020
Capacity: The rated continuous brake horsepower shall not exceed 300.	Title I Condition: limit to avoid classification as a major modification under 40 CFR Section 52.21; and meets 7009.0020
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 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 0.5% by weight.	Minn. R. 7007.0800, 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
Fuel Supplier Receipts: Keep on site, fuel receipts for each fuel shipment. Each receipt shall specify the type of fuel oil delivered.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 024 Emergency Engine Generator EEG-61001**

Associated Items: GP 001 Emergency Generators

SV 018

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 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
Fuel Supplier Receipts: Keep on site, fuel receipts for each fuel shipment. Each receipt shall specify the type of fuel oil delivered.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 025 Emergency Engine Generator EEG-61002**

Associated Items: GP 001 Emergency Generators

SV 019

What to do	Why to do it
Opacity: less than or equal to 20 percent opacity once operating temperatures have been attained.	Minn. R. 7011.2300, subp. 1
Sulfur Dioxide: less than or equal to 0.5 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 0.5% by weight.	Minn. R. 7007.0800, subp. 2
Fuel Supplier Receipts: Keep on site, fuel receipts for each fuel shipment. Each receipt shall specify the type of fuel oil delivered.	Minn. R. 7007.0800, subp. 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 026 Combustion Turbine**

Associated Items: CE 032 Catalytic Reduction

SV 020

What to do	Why to do it
Emission Limits under 40 CFR Section 60.332 *Averaging times are specified for those emission limits where compliance is demonstrated by continuous emission monitors. For all other emission limits, compliance shall be determined, and averaging time is dictated by the appropriate test method. ** Startup for EU 026 shall not exceed 1 hour. *** Shutdown for EU 026 shall not exceed 30 minutes. **** Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.	hdr
Nitrogen Oxides: less than or equal to 110 parts per million using 1-Hour Average at 15% O2 on a dry basis. Applies at all times except during startup, shutdown or malfunction. parts per million is on a volume basis.	40 CFR 60.332(a)(1)
OPERATIONAL REQUIREMENTS	hdr
Sulfur Content of Fuel: less than or equal to 0.004 grains/dry standard cubic foot using 12-month Rolling Average	Title I condition: to limit potential SO2 emissions less than PSD significant net emissions increase as defined in 40 CFR Section 52.21, meets fuel sulfur requirements in 40 CFR 60.333
Fuel usage is limited to pipeline quality natural gas.	Title I condition: to limit potential SO2 emissions less than PSD significant net emissions increase as defined in 40 CFR Section 52.21
MONITORING, TESTING, RECORD KEEPING AND REPORTING REQUIREMENTS (see SV 020)	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **EU 027 Duct Firing Burners**

Associated Items: CE 032 Catalytic Reduction

SV 020

What to do	Why to do it
Emission Limits *Averaging times are specified for those emission limits where compliance is demonstrated by continuous emission monitors. For all other emission limits, compliance shall be determined, and averaging time is dictated by the appropriate test method.	hdr
Front-half Particulate Matter: less than or equal to 0.03 lbs/million Btu heat input	40 CFR 60.42a
Opacity: less than or equal to 20 percent using 6-minute Average except for one 6-minute period per hour of not more than 27 percent.	40 CFR 60.42a
Sulfur Dioxide: less than or equal to 0.20 lbs/million Btu heat input using 30-day Rolling Average	40 CFR 60.43a
Nitrogen Oxides: less than or equal 1.6 lbs/megawatt- hour (gross energy output) based on a 30-day rolling average.	40 CFR 60.44a
OPERATIONAL REQUIREMENTS	hdr
Sulfur Content of Fuel: less than or equal to 0.004 grains/dry standard cubic foot using 12-month Rolling Average	Title I condition: to limit potential SO2 emissions less than PSD significant net emissions increase as defined in 40 CFR Section 52.21, meets fuel sulfur requirements in 40 CFR 60.333
Fuel usage is limited to pipeline quality natural gas.	Title I condition: to limit potential SO2 emissions less than PSD significant net emissions increase as defined in 40 CFR Section 52.21
MONITORING, TESTING, RECORD KEEPING AND REPORTING REQUIREMENTS (see SV 020)	hdr

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **CE 004 Electrostatic Precipitator - High Efficiency**

Associated Items: EU 002 Boiler 2 - retired from service in place

EU 019 Units 3 and 4 Fly Ash Silo Vent

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 associated boiler is operating. Records shall indicate periods of operation on only natural gas.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **CE 005 Electrostatic Precipitator - High Efficiency**

Associated Items: EU 002 Boiler 2 - retired from service in place

EU 019 Units 3 and 4 Fly Ash Silo Vent

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 associated boiler is operating. Records shall indicate periods of operation on only natural gas.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **CE 006 Electrostatic Precipitator - High Efficiency**

Associated Items: EU 003 Boiler 3

EU 019 Units 3 and 4 Fly Ash Silo Vent

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 associated boiler is operating. Records shall indicate periods of operation on only natural gas.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **CE 007 Electrostatic Precipitator - High Efficiency**

Associated Items: EU 003 Boiler 3

EU 019 Units 3 and 4 Fly Ash Silo Vent

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 associated boiler is operating. Records shall indicate periods of operation on only natural gas.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **CE 008 Electrostatic Precipitator - High Efficiency**

Associated Items: EU 004 Boiler 4

EU 019 Units 3 and 4 Fly Ash Silo Vent

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 associated boiler is operating. Records shall indicate periods of operation on only natural gas.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **CE 009 Electrostatic Precipitator - High Efficiency**

Associated Items: EU 004 Boiler 4

EU 019 Units 3 and 4 Fly Ash Silo Vent

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 associated boiler is operating. Records shall indicate periods of operation on only natural gas.	Minn. R. 7007.0800, subp. 4 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **FS 002 Coal Conveyors 6 and 7A**

Associated Items: CE 030 Other

What to do	Why to do it
If exhaust gases from any enclosed coal handling facility exceed 20 percent opacity, either install an exhaust air system and control exhaust gases so that particulate 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 20 percent opacity	Minn. R. 7011.1105 (G)

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: FS 003 Emergency Reclaim Hopper

What to do	Why to do it
Control fugitive particulate emissions by dust suppression methods on such operations so that fugitive particulate emissions are minimized. In the alternative, use an underground bottom feed (plow) of coal to an underground conveyor system provided the exhaust gases from the enclosed spaces do not contain Total Particulate Matter: less than or equal to 0.02 grains/dry standard cubic foot	Minn. R. 7011.1105 (F)

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **FS 004 All Coal Storage Piles (Erosion)**

Associated Items: CE 029 Dust Suppression by Water Spray

What to do	Why to do it
Stockpiles, Stockpile Construction, and Reclaiming: (1) Control fugitive particulate emissions by dust suppression methods on such operations so that fugitive particulate emissions are minimized. (2) In the alternative, use an underground bottom feed (plow) of coal to an underground conveyor system provided the exhaust gases from the enclosed spaces do not contain Total Particulate Matter: less than or equal to 0.02 grains/dry standard cubic foot	Minn. R. 7011.1105 (F)
Coal Pile Area: The total area of all coal piles shall be less than or equal to 14.5 acres.	Minn. R. 7009.0020

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **FS 008 Coal Outstacking**

Associated Items: CE 029 Dust Suppression by Water Spray

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

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **FS 009 Coal Reclaim**

Associated Items: CE 029 Dust Suppression by Water Spray

What to do	Why to do it
Stockpiles, Stockpile Construction, and Reclaiming: (1) Control fugitive particulate emissions by dust suppression methods on such operations so that fugitive particulate emissions are minimized. (2) In the alternative, use an underground bottom feed (plow) of coal to an underground conveyor system provided the exhaust gases from the enclosed spaces do not contain 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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **FS 010 Petroleum Coke Storage (Erosion)**

Associated Items: CE 029 Dust Suppression by Water Spray

What to do	Why to do it
Coke Pile Area: The total area of all coal piles shall be less than or equal to 1.0 acre.	Minn. R. 7009.0020
Stockpiles, Stockpile Construction, and Reclaiming: (1) Control fugitive particulate emissions by dust suppression methods on such operations so that fugitive particulate emissions are minimized. (2) In the alternative, use an underground bottom feed (plow) of coal to an underground conveyor system provided the exhaust gases from the enclosed spaces do not contain Total Particulate Matter: less than or equal to 0.02 grains/dry standard cubic foot	Minn. R. 7011.1105 (F)

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **FS 013 Ash Hauling Traffic**

Associated Items: CE 029 Dust Suppression by Water Spray

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

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **FS 014 Coal Yard Traffic**

Associated Items: CE 029 Dust Suppression by Water Spray

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

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: FS 015 Coal Conveyors 7,7B,7C

What to do	Why to do it
If exhaust gases from any enclosed coal handling facility exceed 20 percent opacity, either install an exhaust air system and control exhaust gases so that particulate 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 20 percent opacity	Minn. R. 7011.1105 (G)

TABLE A: LIMITS AND OTHER REQUIREMENTS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: FS 016 Coal Conveyor 8

What to do	Why to do it
If exhaust gases from any enclosed coal handling facility exceed 20 percent opacity, either install an exhaust air system and control exhaust gases so that particulate 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 20 percent opacity	Minn. R. 7011.1105 (G)

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Subject Item: **FS 017 Dumper Unloading Bldg (fugitives from unloading railcar/scraper)**

Associated Items: CE 031 Other

What to do	Why to do it
Unload railcars only within a permanent building or structure. If exhaust gases from such building or structure exceed 20 percent opacity, then the owner or operator shall either install an exhaust air system and limit particulate emissions to 0.020 gr/dscf or control exhaust gases using dust suppression methods so that particulate emissions do not exhibit Opacity: greater than 20 percent opacity	Minn. R. 7011.1105 (H)
Truck and Hauler Unloading Stations: Control fugitive particulate emissions from the unloading of truck or haulers by dust suppression methods so that emissions from such sources are minimized. Control emissions by unloading reclaimed coal within a partial enclosure and with fabric filters.	Minn. R. 7011.1105 (C)

TABLE B: SUBMITTALS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

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

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

What to send	When to send	Portion of Facility Affected
Acid Rain Application for Permit Reissuance	due 180 days before expiration of Existing Permit	EU003, EU004
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
CEM Certification Test Plan	due 45 days before CEM Certification Test.	SV020
CEM Certification Test Report - Microfiche Copy	due 105 days after CEM Certification Test.	SV020
CEM Certification Test Report	due 30 days after CEM Certification Test.	SV020
Computer Dispersion Modeling Protocol	due 1096 days after 08/13/1998 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.	Total Facility
Computer Dispersion Modeling Protocol	due 30 days after 08/13/1998 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.	Total Facility
Computer Dispersion Modeling Results	due 1462 days after 08/13/1998 and after the MPCA has reviewed and approved the modeling protocol.	Total Facility
Computer Dispersion Modeling Results	due 90 days after 08/13/1998 and after the MPCA has reviewed and approved the modeling protocol.	Total Facility
Fugitive Control Plan	due 60 days after 08/13/1998 for review and approval by the Commissioner. The plan shall identify all fugitive emission sources, primary and contingent control measures, and recordkeeping (if applicable). 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 measures took place.	Total Facility
Notification of the Actual Date of Initial Startup	due 15 days after Initial Startup	SV020
Notification of the Date Construction Began	due 30 days after Start Of Construction	SV020
Relative Accuracy Test Audit (RATA) Notification	due 30 days before CEMS Relative Accuracy Test Audit (RATA)	SV020
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 PM-10 and VOC emissions. The plan shall specify a testing frequency based on the test data and MPCA guidance. Future performance tests based on one-year (12 month), 36 month, and 60 month intervals, or as applicable, shall be required upon written approval of the MPCA.	SV020

TABLE B: RECURRENT SUBMITTALS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

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 CEM Certification Test (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of monitor bypass and all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdown, and malfunctions.	SV020
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter starting 08/13/1998 (Submit Deviations Reporting Form DRF-1 as amended). The EER shall indicate all periods of exceedances of the limit 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, SV020
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
Cylinder Gas Audit (CGA) Results Summary	due 30 days after end of each calendar half-year following Cylinder Gas Audit	SV020
Deviations Report	due 30 days after end of each calendar half-year starting 08/13/1998 (July 30th and January 30th). The first report covers January 1 - June 30. The second report covers July1 - December 31.	Total Facility
Relative Accuracy Test Audit (RATA) Results Summary	due 30 days after end of each calendar half-year following CEMS Relative Accuracy Test Audit (RATA)	SV020
Compliance Certification Report (Acid Rain Program)	due 60 days after end of each calendar year following Initial Startup. The report shall include all information required by 40 CFR Section 72.90(b) and (c).	SV020
Compliance Certification Report (Acid Rain Program)	due 60 days after end of each calendar year starting 01/01/2000 . The designated representative shall submit an annual compliance certification report for the unit in accordance with 40 CFR Section 72.90(a). The report shall include all information required by 40 CFR Section 72.90(b) and (c).	EU003, EU004
Compliance Certification	due 30 days after end of each calendar year starting 08/13/1998 (January 30th).	Total Facility
Performance Test Notification (written)	due 30 days before end of each 60 months starting 12/31/93 (30 days before each Performance Test)	EU003
Performance Test Notification (written)	due 30 days before end of each 60 months starting 12/31/93 (30 days before each Performance Test)	EU004
Performance Test Plan	due 30 days before end of each 60 months starting 12/31/93 (30 days before each Performance Test)	EU003
Performance Test Plan	due 30 days before end of each 60 months starting 12/31/93 (30 days before each Performance Test)	EU004
Performance Test Report - Microfiche Copy	due 105 days after end of each 60 months starting 12/31/93 (105 days after each Performance Test)	EU003

TABLE B: RECURRENT SUBMITTALS

05/14/02

Facility Name: NSP - Black Dog

Permit Number: 03700003 - 003

Performance Test Report - Microfiche Copy	due 105 days after end of each 60 months starting 12/31/93 (105 days after each Performance Test)	EU004
Performance Test Report	due 45 days after end of each 60 months starting 12/31/93 (45 days after each Performance Test)	EU003
Performance Test Report	due 45 days after end of each 60 months starting 12/31/93 (45 days after each Performance Test)	EU004

APPENDIX MATERIAL

Facility Name: NSP - Black Dog

Permit Number: 03700003-003

Phase II NOx Compliance Plan

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

This submission is: [X] **New** [ ] **Revised**

Step 1 **Indicate plant name,** **State, and ORIS code** **from NADB, if applicable**	Black Dog Plant Name	MN State	1904 ORIS Code

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

	ID# 1	ID# 3	ID# 4	ID#	ID#	ID#
	T Type	DBW Type	DBW 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 Phase II dry bottom wall-fired boilers)						
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II 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			
(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			

(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 NOx Averaging Plan

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

This submission is: **New** ☐ ☒ **Revised**

Step 1

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

Plant Name	State	ID#	(a) 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 averge 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

[X] 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 [X] New [ ] Revised

Black Dog Plant Name	MN State	1904 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
1	Yes	no		
3	Yes	no		
4	Yes	no		
5	Yes	no	May 2002	August 2002
	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.

May 17, 2002

Ms. Nancy Stafki
Senior Environmental Analyst
Xcel Energy
414 Nicollet Mall (Ren. Sq. 8)
Minneapolis, Minnesota 55401-1993

RE: Air Emission Permit No. 03700003-003, Administrative Amendment to the Title V Permit for the Xcel Energy Black Dog Generating Plant

Dear Ms. Stafki:

Enclosed is permit 03700003-003 (Administrative Amendment to the existing Title V operating permit) for the Black Dog Generating Plant.

Please read through the permit and review its conditions and requirements. Distribute the permit to staff members responsible for ensuring compliance with the conditions and limitation in the permit. This permit replaces the existing permit no. 03700003-002. The expiration date remains August 13, 2003.

We appreciate your cooperation and compliance with environmental laws. If you have any questions about the permit, please contact me at (651) 296-9711.

Sincerely,

John S. Chikkala
Staff Engineer
Majors Air and Construction Section
Majors and Remediation Division

JSC:lh

Enclosure

cc: Robert Miller, U.S. Environmental Protection Agency
AQD File No. 202E