

AIR EMISSION PERMIT NO. 09100007- 002

IS ISSUED TO

INTERSTATE POWER COMPANY

INTERSTATE POWER - FOX LAKE STATION

County Road 28

Sherburn, Martin County, Minnesota 561710367

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	09/15/95

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 and with all general conditions listed in Minn. R. 7007.0800, subp. 16, [and all standard permit requirements listed in 40 CFR § 70.6\(a\)](#), which are incorporated by reference. Any changes or modifications to the stationary source must be performed in compliance with Minn. R. 7007.1150 to 7007.1500. Terms used in the permit as defined in the state air pollution control rules unless the term is explicitly defined in the permit.

This permit administratively amends Air Emission Permit No. 09100007- 001. That permit contained an incorrect permit number in the cover pages. This permit has the correct permit number on the cover page.

Permit Type: Federal ; Part 70

Issue Date: July 30, 1997

Expiration:
All Title I Conditions do not expire.

Michael J. Sandusky
Acting Division Manager
Air Quality Division

for Peder A. Larson
Commissioner
Minnesota Pollution Control Agency

JLR:lao

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NOTICE TO THE PERMITTEE:

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

Metro Area	(612)296-6300
Outside Metro Area	1-800-657-3864
TTY	(612)282-5332

The rule 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. Any requirements which have been determined not to apply are listed in Table A of this permit.

The permit shield, however does not apply to: Minn. R. ch. 7030 (Noise Pollution Control).

FACILITY DESCRIPTION:

Emission units at the Fox Lake Station consist of three power boilers, one combustion turbine, one heating boiler, and ash and fuel handling activities and equipment. The main fuels for Boiler Nos. 1 and 2 are oil and natural gas. The main fuels for Boiler No. 3 are coal, oil and natural gas. The combustion turbine is oil fired, and the heating boiler is fired with oil and natural gas. Emissions are controlled from Boiler No. 3 by an electrostatic precipitator. Emissions from some of the materials handling equipment are controlled by baghouse.

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

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

Subject Item:**Total Facility**

What to do	Why to do it
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 & subp. 16(J)
Shutdown. The owner or operator of an emission facility shall notify the commissioner at least 24 hours in advance of shutdown of any control equipment and, if the shutdown would cause an increase in the emission of air contaminants, of a shutdown of any process equipment. At the time of notification, the owner or operator shall also notify the commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 1
Breakdown. The owner or operator of an emission facility shall notify the commissioner immediately of a breakdown of more than one hour duration of any control equipment and, if the breakdown causes an increase in the emission of air contaminants, of a breakdown of any process equipment. At the time of notification or as soon thereafter as possible, the owner or operator shall also notify the commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
Monitoring Equipment: Install or make needed repairs to monitoring equipment within 60 days of issuance of the permit if monitoring equipment is not installed and operational on the date the permit is issued.	Minn. R. 7007.0800, subp. 4(d)
Monitoring Equipment Calibration: Annually calibrate all required monitoring equipment (any requirements applying to continuous emission monitors are listed separately in this permit).	Minn. R. 7007.0800, subp. 4(D)
Operations of Monitoring Equipment: Unless otherwise noted in Tables A,B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, such as for system breakdowns, repairs, calibration checks, and zero and span adjustments (as applicable). Monitoring records should reflect any such periods of process shutdown.	Minn. R. 7007.0800, subp. 4(D)
Circumvention: Do not install or use a device or means that conceals or dilutes emissions, which would otherwise violate a federal or state air pollution control rule, without reducing the total amount of pollutant emitted.	Minn. R. 7011.0020
Performance Testing: Conduct all performance tests in accordance with Minn. R. ch. 7017 unless otherwise noted in Tables A,B and/or C.	Minn. R. ch. 7017
Oral Notification of Deviations Endangering Human Health or the Environment: Within 24 hours of discovery, orally notify the Commissioner of any deviation from permit conditions which could endanger human health or the environment. Oral Notification of Deviations Endangering Human Health or the Environment: Within 24 hours of discovery, orally notify the Commissioner of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7007.0800, subp. 6(A)
Discovery of Deviation: due 2 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, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the deviation.	Minn. R. 7007.0800, subp. 6(A)
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. 7007.1150-7007.1500
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005-7002.0095
Inspections: Upon presentation of credentials, 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 a reasonable times (which include any time the source is operating) any facilities, equipment, practices or operation, and to sample or monitor any substances or parameters at any location.	Minn. R. 7007.0800, subp. 9(A)
Recordkeeping: Maintain records describing any insignificant modifications (as required by Minn. R. 7007.1250, subp 3) or changes contravening permit terms (as required by Minn. R. 7007.1350, subp 2), including records of the emissions resulting from those changes.	Minn. R. 7007.0800, subp. 5(B)

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

Recordkeeping: Retain all records at the stationary source for a period of five (5) years from the date of monitoring, sample, measurement, or report. Records which must be retained at this location include all calibration and maintenance records, all original 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)
Extension Requests: The permittee may apply for an Administrative Amendment to extend a deadline in a permit by no more than 120 days provided that the proposed amendment meets the requirements of Minn. R. 7007.1400, subp 1(H).	Minn. R. 7007.1400, subp. 1(H)
Fugitive Emissions: The Permittee shall 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. The Permittee must also comply with all other requirements listed in Minn. R. 7011.0150.	Minn. R. 7011.0150
Fugitive Control Plan: The Permittee shall submit a fugitive emission control plan within 60 days of the date of permit issuance date for review and approval by the Commissioner. The plan shall identify all fugitive emission sources, primary and contingent control measures, and record keeping.	Minn. Stat. Section 116.07, subp. 4a, and Minn. R. 7007.0800, subp. 2
Comply with Fugitive Emissions Control Plan: The Permittee shall follow the actions and record keeping specified in the control plan. The plan may be amended by the Permittee with the Commissioner's approval. If the Commissioner determines the Permittee is out of compliance with Minn. R. 7011.0150 or the fugitive 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, subp. 4a, and Minn. R. 7007.0800, subp. 2
No emissions of acidic or alkaline substances in such amount that the downwind fallout rate at any place where an adverse effect could occur exceed the upwind fallout rate by five or more spots per hour, measured in accordance with Minn. R. pt. 7011.0405.	Minn. R. 7011.0400
Operating and/or production limits will be placed on emission units based on operating conditions during compliance testing. Limits set as a result of a compliance test (conducted before or after permit issuance) apply until new operating/production limits are set following formal review of a performance test as specified by Minn. R. 7017.2025.	Minn. R. 7017.2025
Comply with general conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
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)
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 requirement only and is not federally enforceable.	Minn. R. 7030.0010 - 7030.0080

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

Subject Item: EU 001 Boiler #1

Associated Items: SV 001

What to do	Why to do it
Particulate Matter Emissions limit met by fuel use restriction. Fuel restricted to residual fuel oil, distillate fuel oil, and natural gas which ensures compliance with the limit set by Minn. R. 7011.0510 subp 1.	Minn. R. 7007.0800, subp. 2
Sulfur Dioxide: less than or equal to 2 lbs/million BTU heat input when burning liquid fuel. When liquid fuel is burned simultaneously with natural gas, the sulfur dioxide is limited to: $w = y(a)/(x+y)$ where: w = the emission limit, x = % heat input from gaseous fuel, y = % heat input from liquid fuel, and $a = 2$ lb/mmBtu.	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0510, subp. 2
Fuel Use: limited to residual oil, distillate oil, natural gas, and boiler cleaning agents	Minn. R. 7007.0800, subp. 2
Distillate Fuel Oil: When burning distillate fuel oil, determine compliance with the sulfur dioxide emission limit by calculating the emission rate in lb/mmBtu from records of fuel oil purchasing specifications, from fuel oil analysis received from vendor or from own sampling and analysis. Analysis must be performed using accepted ASTM methods for determining sulfur content and heating value. Keep the results of the calculation on site.	Minn. R. 7007.0800, subp. 2 and 5
Residual Fuel Oil: When burning residual oil, determine compliance with the sulfur dioxide emission limit by sampling, analyzing, and calculating the sulfur dioxide emission rate in lb/mmBtu from each fuel oil delivery. Analysis must be performed using accepted ASTM methods for determining sulfur content and heating value. Keep the results of the calculation on site.	Minn. R. 7007.0800, subp. 2 and 5
Boiler cleaning agents limited to: EDTA type are generated on-site. Operating conditions that must be met when burning boiler cleaning agents are: 1) the agents may comprise a maximum of 5% of total mass or heat input, 2) oxygen must be 3% or greater, and 3) agents may only be burned while the boiler is operating at 75% of rated capacity or greater.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

Subject Item: EU 002 Boiler #2

Associated Items: SV 001

What to do	Why to do it
Particulate matter emissions limit met by fuel use restriction. Fuel restricted to residual fuel oil, distillate fuel oil, and natural gas which ensures compliance with 7011.0510 subp 1	Minn. R. 7007.0800, subp. 2
Sulfur Dioxide: less than or equal to 2 lbs/million BTU heat input when burning liquid fuel. When liquid fuel is burned simultaneously with natural gas, the sulfur dioxide is limited to: $w = y(a)/(x+y)$ where: w = the emission limit, x = % heat input from gaseous fuel, y = % heat input from liquid fuel, and $a = 2$ lb/mmBtu.	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0510, subp. 2
Fuel Use: limited to residual oil, distillate oil, natural gas, and boiler cleaning agents	Minn. R. 7007.0800, subp. 2
Boiler cleaning agents limited to: EDTA type are generated on-site. Operating conditions that must be met when burning boiler cleaning agents are: 1) the agents may comprise a maximum of 5% of total mass or heat input, 2) oxygen must be 3% or greater, and 3) agents may only be burned while the boiler is operating at 75% of rated capacity or greater.	Minn. R. 7007.0800, subp. 2
Distillate Fuel Oil: When burning distillate fuel oil, determine compliance with the sulfur dioxide emission limit by calculating the emission rate in lb/mmBtu from records of fuel oil purchasing specifications, from fuel oil analysis received from vendor or from own sampling and analysis. Analysis must be performed using accepted ASTM methods for determining sulfur content and heating value. Keep the results of the calculation on site.	Minn. R. 7007.0800, subp. 2 and 5
Residual Fuel Oil: When burning residual oil, determine compliance with the sulfur dioxide emission limit by sampling, analyzing, and calculating the sulfur dioxide emission rate in lb/mmBtu from each fuel oil delivery. Analysis must be performed using accepted ASTM methods for determining sulfur content and heating value. Keep the results of the calculation on site.	Minn. R. 7007.0800, subp. 2 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

Subject Item: EU 003 Boiler #3**Associated Items:** CE 001 Electrostatic Precipitator - High Efficiency

MR 001

MR 002

MR 003

MR 004

MR 005

SV 002

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.6 lbs/million BTU heat input	Minn. R. 7011.0510, subp. 1
Sulfur Dioxide: less than or equal to 4 lbs/million BTU heat input for solid fuel, and less than 2.0 lb/mmBtu for liquid fuel. When fuels are burned simultaneously in any combination, the applicable sulfur dioxide standard shall be determined by the following formula; $w = y(a)+z(b)/(x+y+z)$ Where: w = the emission limit, x = %heat input from gaseous fuel, y = %heat input from liquid fuel, z = %heat input from solid fossil fuel, a = 2 lb/mmBtu, and b = 4 lb/mmBtu	Minn. R. 7011.0510, subp. 1
Opacity: less than or equal to 20 percent opacity ; except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0510, subp. 2
Fuel use: limited to bituminous and sub-bituminous coal, residual oil, distillate oil, natural gas, used oil, hazardous waste, and boiler cleaning agents.	Minn. R. 7007.0800, subp. 2
Burn hazardous waste in accordance with 40 CFR pt. 266.108 and Minn. R. 7045.0692. Requirements include: 1) hazardous waste burning limited to: 680 gallons per month, 2) must have a minimum heating value of 5000 Btu/lb, 3) must be generated on-site, 4) must not exceed 1 percent of total fuel requirements for the boiler on a volume basis, 5) must not contain or be derived from EPA Hazardous Waste Nos. F020, F021, F022, F023, F026 or F027 6) must not be listed for characteristics other than ignitability, 7) must not be a hazardous waste sludge, 8) must not be considered toxic under Minn. R. 7045.0131 subp. 6.	Minn. R. 7007.0800, subp. 2
Recordkeeping for Hazardous Waste Burning: Keep records of the hazardous waste firing rate and heating value in accordance with 40 CFR pt. 266.108. At a minimum these records must indicate the quantity of hazardous waste and other fuel burned per calendar month, and the heating value in Btu/lb of the hazardous waste.	Minn. R. 7007.0800, subp. 2
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)
Comply with the applicable Acid Rain emissions limitation for sulfur dioxide.	40 CFR Section 72.9(c)(1)(ii), 40 CFR Section 72.9(g)(4)
Acid Rain Program Recordkeeping: 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.	40 CFR Section 72.9(f)(i)
Certify Acid Rain Program submittals. 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 ' 72.21	40 CFR Section 72.21
Submit a complete permit application and compliance plan for NOx emissions in accordance with 40 CFR ' 76.9	40 CFR Section 76.9(b)(2)
Submit an annual compliance certification report for Acid Rain Program requirements. The designated representative shall submit within 60 days after the end of the calendar year, an annual compliance certification report for the unit in accordance with 40 CFR ' 72.90(a). The report shall include all information required by 40 CFR ' 72.90(b) and (c).	40 CFR Section 72.90

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

Emissions Monitoring: The owner or operator shall measure opacity and all SO ₂ , NO _x , CO ₂ , and flow emissions for each affected unit in accordance with 40 CFR ' 75.10.	40 CFR Section 75.10
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 app 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 Section 75.4(b)
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 App B.	40 CFR pt. 75 App 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 App B, section 2.2
Opacity Audit: due before end of each calendar year following COMS Certification Test . The opacity audit includes the following: optical alignment, zero compensation, stack exit correlation, and zero alignment audits.	Minn. R. 7007.0800, 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. 7007.0800, subp. 2
COMS Continuous Operation: Except for system breakdowns, repairs, calibration checks, and zero and span adjustments, all COMS shall be in continuous operation.	Minn. R. 7007.0800, subp. 2
COMS Daily Calibration Drift (CD) Check: COMS shall be checked at least once daily and CD quantified and recorded at zero (low-level) and upscale (high-level) opacity. Whenever the calibration drift (CD) exceeds twice the specification of PS-1, the COMS is out of control.	Minn. R. 7017.1000; Minn. R. 7007.0800, subp. 2
Initial Performance Test: due 180 days after Initial Startup of resuming coal combustion to determine compliance with the particulate matter emissions limit in Minn. R. 7011.0510 subp 1.	Minn. R. 7017.2020, subp. 1
CEMS QA/QC: The owner or operator of an affected facility shall operate, calibrate, and maintain each CEMS according to the QA/QC procedures in 40 CFR pt. 75, Appendix B as amended.	40 CFR Section 75.21
Combust used oil in accordance with used oil regulations, Minn. R. ch. 7045, and limit to 5% of total mass or heat input on an hourly basis.	Minn. R. 7007.0800, subp. 2
Use opacity CEM to measure opacity in one-minute averages to determine compliance with the opacity limit.	Minn. R. 7007.0800, subp. 2
Performance Test: due before end of each 60 months following Initial Performance Test to determine compliance with the particulate matter emissions limit in Minn. R. 7011.0510 subp. 1. 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 following Initial Performance Test (7 days before each Performance Test)	Minn. R. 7017.2030, subp. 4
Performance Test Pre-test Meeting: due 7 days before Initial Performance Test	Minn. R. 7017.2030, subp. 4
COMS Calibration Error Audit: due 30 days after end of each calendar half-year following COMS Calibration Error Audit .	Minn. R. 7007.0800, subp. 2
CEMS Data: All quality assured CEMS data shall be used to determine compliance with the SO ₂ emission limits.	Minn. R. 7007.0800, subp. 2
Recordkeeping: Maintain 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. 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 years from the date of the monitoring sample, measurement, or report. Records shall be kept at the source.	Minn. R. 7007.0800, subp. 5
COMS Data: All quality assured COMS data shall be used to determine compliance with the opacity limit.	Minn. R. 7007.0800, subp. 2
COMS Monitoring Data: Owners or operators of all COMS shall reduce all data to six-minute averages except that a one-minute averaging period as described in part 7017.2060, subp. 6, shall be used in the event an applicable standard for a specified period of minutes in a one-hour period. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the applicable averaging period.	Minn. R. 7007.0800, subp. 2
Use SO ₂ CEM to measure sulfur dioxide in lb/mmBtu and determine compliance with SO ₂ emission limit hourly, on a 3 hour average.	Minn. R. 7007.0800, subp. 2
Notify: due 30 days after Initial Startup upon resuming coal combustion. Submit a written notification of startup on coal. This requirement is necessary to initiate the performance testing requirement for PM.	Minn. Stat. 116.07, subd. 4a

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

Boiler cleaning agents limited to: EDTA type are generated on-site. Operating conditions that must be met when burning boiler cleaning agents are: 1) the agents may comprise a maximum of 5% of total mass or heat input, 2) oxygen must be 3% or greater, and 3) agents may only be burned while the boiler is operating at 75% of rated capacity or greater.	Minn. R. 7007.0800, subp. 2
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TABLE A: LIMITS AND OTHER REQUIREMENTS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

Subject Item: EU 004 Combustion Turbine**Associated Items:** SV 003

What to do	Why to do it
Sulfur Dioxide: less than or equal to 1.75 lbs/million BTU heat input	Minn. R. 7011.2300, subp. 2
Opacity: less than or equal to 20 percent opacity for more than 10 consecutive seconds once operating temps have been obtained.	Minn. R. 7011.2300, subp. 1
Fuel Oil: When burning fuel oil, determine compliance with the sulfur dioxide emission limit by calculating the emission rate in lb/mmBtu from records of fuel oil purchasing specifications, from fuel oil analysis received from vendor or from own sampling and analysis. Analysis must be performed using accepted ASTM methods for determining sulfur content and heating value. Keep the results of the calculation on site.	Minn. R. 7007.0800, subp. 5
Fuel use: Limited to distillate fuel oil.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

Subject Item: EU 005 Heating Boiler**Associated Items:** SV 004

What to do	Why to do it
Particulate matter emissions limit met by fuel use restriction. Fuel restricted to fuel oil and natural gas which ensures compliance with 7011.0515 subp 1.	Minn. R. 7007.0800, subp. 2
Sulfur Dioxide: less than or equal to 1.08 lbs/million BTU heat input	Title I Condition: limit to avoid classification as a significant net emissions increase as defined by 40 CFR Section 52.21; ensures compliance with Minn. R. 7011.0515, subp. 1
Opacity: less than or equal to 20 percent opacity except that a maximum of 60 percent opacity shall be permissible for four minutes in any 60-minute period and that a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60-minute period.	Minn. R. 7011.0515, subp. 2
Fuel Usage: less than or equal to 1 percent by weight maximum content sulfur in distillate oil and natural gas.	Title I Condition: limit to avoid classification as a significant net emissions increase as defined by 40 CFR Section 52.21
Fuel Oil: When burning fuel oil, determine compliance with the sulfur dioxide emission limit by calculating the emission rate in lb/mmBtu from records of fuel oil purchasing specifications, from fuel oil analysis received from vendor or from own sampling and analysis. Analysis must be performed using accepted ASTM methods for determining sulfur content and heating value. Keep the results of the calculation on site.	Title I Condition: limit to avoid classification as a significant net emissions increase as defined by 40 CFR Section 52.21

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

Subject Item: EU 006 Ash Silo Bin Vent**Associated Items:** CE 002 Fabric Filter - Low Temperature, i.e., T<180 Degrees F
SV 005

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot if not required to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0715
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715
Operate fabric filter when emissions from the equipment are vented to the atmosphere to ensure compliance with the opacity and particulate standards.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

Subject Item: EU 007 Ash Transport Blower A & B**Associated Items:** CE 003 Fabric Filter - Low Temperature, i.e., T<180 Degrees F

SV 006

SV 007

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot if not required to comply with the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0715
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715
Operate fabric filter when emissions from the equipment are vented to the atmosphere to ensure compliance with the opacity and particulate emission standards.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

Subject Item: EU 008 Comb. Turbine Starting Diesel**Associated Items:** SV 003

What to do	Why to do it
Sulfur Dioxide: less than or equal to 1.75 lbs/million BTU heat input	Minn. R. 7011.2300, subp. 2
Opacity: less than or equal to 20 percent opacity for more than 10 consecutive seconds once operating temps have been obtained.	Minn. R. 7011.2300, subp. 1
Fuel Oil: When burning fuel oil, determine compliance with the sulfur dioxide emission limit by calculating the emission rate in lb/mmBtu from records of fuel oil purchasing specifications, from fuel oil analysis received from vendor or from own sampling and analysis. Analysis must be performed using accepted ASTM methods for determining sulfur content and heating value. Keep the results of the calculation on site.	Minn. R. 7007.0800, subp. 2 and 5

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

Subject Item: CE 002 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 006 Ash Silo Bin Vent

What to do	Why to do it
Inspect quarterly, or as required by manufacturing specifications, all components that are not subject to wear or plugging, including structural componenets, housing, ducts, and hoods. Maintain a written record of the inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 2
Inspect monthly, or as required by manufacturing specifications, all components that are subject to wear or plugging. Maintain a written record of the inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 2
Check pressure drop once every 48 hours. Verify that pressure drop is within manufacturers recommended range. Record the results.	Minn. R. 7007.0800, subp. 2
Check visible emissions once every 48 hours. If visible emissions exist, inspect equipment for evidence of malfunction, including broken bags. Record the results of the inspection, and any corrective action taken.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

Subject Item: CE 003 Fabric Filter - Low Temperature, i.e., T<180 Degrees F**Associated Items:** EU 007 Ash Transport Blower A & B

What to do	Why to do it
Check pressure drop once every 48 hours. Verify that pressure drop is within manufacturers recommended range. Record the results.	Minn. R. 7007.0800, subp. 2
Inspect quarterly, or as required by manufacturing specifications, all components that are not subject to wear or plugging, including structural components, housing, ducts, and hoods. Maintain a written record of the inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 2
Inspect monthly, or as required by manufacturing specifications, all components that are subject to wear or plugging. Maintain a written record of the inspection and any action resulting from the inspection.	Minn. R. 7007.0800, subp. 2
Check visible emissions once every 48 hours. If visible emissions exist, inspect equipment for evidence of malfunction, including broken bags. Record the results of the inspection, and any corrective action taken.	Minn. R. 7007.0800, subp. 2

TABLE B: SUBMITTALS

07/30/97

Facility Name: Interstate Power - Fox Lake Station
Permit Number: 09100007 - 002

Table B lists the submittals you must send to the Commissioner. Table B is divided into two sections, for source-specific submittal requirements and for submittals required of all permittees. Source-specific submittals are further organized as either one-time only or recurrent requirements. You may also be subject to additional reporting requirements contained in the compliance schedule located in Table C of this permit. All submittals must be postmarked or received by the date specified in the table, and certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Submittals which must be provided on standardized forms approved by the Commissioner are noted in Tables B and C.

Send any application for a permit or permit amendment to: Permit Information Coordinator, Permit Section, Air Quality Division, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4914. Also send the Permit Information Coordinator notices of: accumulated insignificant activities, installation of control equipment, replacement of an emissions unit, and changes that contravene a permit term.

Send all other submittals to: Compliance Tracking Coordinator, Compliance Determination Unit, Air Quality Division, Minnesota Pollution Control Agency, 520 Lafayette Road North, St. Paul, Minnesota 55155-4194.

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

What to send	When to send	Portion of Facility Affected
Application for Permit Reissuance	due 180 days before expiration of Existing Permit	Total Facility
Application for Permit Reissuance	due 180 days before expiration of Existing Permit for Acid Rain. The designated representative shall submit a complete Acid Rain permit application for each source with an affected unit at least 6 months prior to the expiration of an existing Acid Rain Permit in accordance with 40 CFR ' 72.30(c)	EU003
Computer Dispersion Modeling Protocol	due 1,095 days after Permit Issuance . Dispersion modeling is required for PM10, SO2, or NOx if potential emissions from your facility are in excess of 100 tons per year. The protocol will describe the proposed modeling methodology and input data in accordance with all requirements of 40 CFR pt. 51, App. W. The protocol may be based on proposed operating conditions under the next permit term.	Total Facility
Computer Dispersion Modeling Results	due 1,460 days after Permit Issuance	Total Facility
Performance Test Notification (written)	due 30 days before Initial Performance Test	EU003
Performance Test Plan	due 30 days before Initial Performance Test	EU003
Performance Test Report - Microfiche Copy	due 105 days after Initial Performance Test	EU003
Performance Test Report	due 45 days after Initial Performance Test	EU003
Relative Accuracy Test Audit (RATA) Notification	due 30 days before CEMS Relative Accuracy Test Audit (RATA) .	EU003

TABLE B: RECURRENT SUBMITTALS

07/30/97

Facility Name: Interstate Power - Fox Lake Station

Permit Number: 09100007 - 002

What to send	When to send	Portion of Facility Affected
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter following CEM Certification Test . The EER consists of Form DRF-1.	EU003
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter following COMS Certification Test . The EER consists of form DRF-1.	EU003
Linearity Test Results Summary	due 30 days after end of each calendar quarter following Linearity and Leak Check Test (Acid Rain Program) if performed. This report shall consist of a results summary of the linearity and leak check tests.	EU003
Relative Accuracy Test Audit (RATA) Results Summary	due 30 days after end of each calendar half-year following CEM Certification Test or 30 days after the end of the calendar quarter in which the CEMS RATA was conducted. This report shall consist of a results summary of the RATA.	EU003
Semiannual Deviations Report	due 30 days after end of each calendar half-year following Permit Issuance A mid-year report, covering deviations which occurred during the period from January 1 through June 30, is due by July 30 of each year. An end-of-year report, covering deviations which occurred during the period from July 1 through December 31, is due by January 30 of each year. The report must be submitted even if there were no deviations for the reporting period. To be submitted on a form approved by the Commissioner.	Total Facility
Compliance Certification	due 30 days after end of each calendar year following Permit Issuance (for the previous calendar year). To be submitted on a form approved by the Commissioner. The Compliance Certification shall be submitted both to the Commissioner and to the U.S. EPA regional office in Chicago.	Total Facility
COMS Audit Results Summary	due 30 days after end of each calendar year following Opacity Audit . Submit on a form approved by the Commissioner. (i.e. optical alignment, zero compensation, stack exit correlation, and zero alignment audits).	EU003
Emissions Inventory Report	due 91 days after end of each calendar year following Permit Issuance (April 1st). To be submitted on a form approved by the Commissioner.	Total Facility
Performance Test Notification (written)	due 30 days before end of each 60 months following Initial Performance Test (30 days before each Performance Test)	EU003
Performance Test Plan	due 30 days before end of each 60 months following Initial Performance Test (30 days before each Performance Test)	EU003
Performance Test Report - Microfiche Copy	due 105 days after end of each 60 months following Initial Performance Test (105 days after each Performance Test)	EU003
Performance Test Report	due 45 days after end of each 60 months following Initial Performance Test (45 days after each Performance Test)	EU003

July 29, 1997

Mr. Fred Lindeman, Director
Power Plant Construction
Interstate Power Company
P.O. Box 769
Dubuque, Iowa 52004-0769

RE: Air Emission Permit No. 09100007-002

Dear Mr. Lindeman:

The enclosed permit, Air Emission Permit No. 09100007-002, authorizes operation of your facility located at County Road 28, Sherburn, Martin County, Minnesota.

This permit is being issued to correct the permit number that was on the cover pages of your previously issued permit. The requirements have also been reordered in a format that is hopefully easier to follow. No other changes have been made to the permit.

We appreciate your cooperation and compliance with environmental laws. If you have questions about the permit, please feel free to contact me at (612)282-9889.

Sincerely,

Jenny L. Reinertsen, P.E.
Supervisor Permit Unit I
Permit Section
Air Quality Division

JLR:lao

Enclosure