AIR EMISSION PERMIT NO. 13700027- 002

IS ISSUED TO

City of Hibbing

Hibbing Public Utilities
P. O. Box 249
Hibbing, St. Louis County, MN 55746

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	September 13, 1995
Administrative Amendment	June 8, 2000

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

Permit Type: Federal; Part 70
Issue Date: January 4, 2001
Expiration: September 12, 2002

All Title I Conditions do not expire.

Ann M. Foss
Manager
North/South Major Facilities

for Karen A. Studders
Commissioner
Minnesota Pollution Control Agency

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NOTICE TO THE PERMITTEE:

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

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

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

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

PERMIT SHIELD:

Subject to the limitations in Minn. R. 7007.1800, compliance with the conditions of this permit shall be deemed compliance with the specific provision of the applicable requirement identified in the permit as the basis of each condition. Subject to the limitations of Minn. R. 7007.1800 and 7017.0100, subp. 2, notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

FACILITY DESCRIPTION:

The Hibbing Public Utilities Commission (HPUC) operates a co-generation facility for the City of Hibbing. The facility generates electrical power for the City and steam for space heating of businesses, schools, and residences. The HPUC power plant is located in downtown Hibbing and was originally constructed in 1919. The emission units at the source consist of three coal/natural gas-fired boilers, an ash-handling system, as well as the two natural gas-fired boilers located a few blocks away at Hibbing High School that are connected to the HPUC steam distribution system. The five boilers are labeled Boiler No. 1A, Boiler No. 2A, Boiler No. 3A, High School Boiler No. 1, and High School Boiler No. 2.

Boilers 1A, 2A, and 3A are spreader stoker units that can burn subbituminous coal, bituminous coal, natural gas, wood waste, and peat. Boilers 1A, 2A, and 3A are each equipped with their own electrostatic precipitator (for particulate matter control) and exhaust stack. This permit allows the facility to also burn used oil and oily paper-based sorbents (including oily rags) in Boilers No. 1A, 2A, and 3A.

The high school boilers combust only natural gas. The High School boilers were constructed in 1972 and connected at that time to the HPUC steam heating system. The HPUC became the sole operator of these units in 1982. However, the change of operator was not considered a modification under New Source Review. Currently these natural gas-fired boilers are only operated a few days per year for emergency back-up. The majority of the steam heat for the school is supplied by the main HPUC boilers.

Boilers No. 1A and 2A are rated at 216 mmBtus (million Btu) per hour (125,000 lbs. of steam per hour). Boiler No. 3A is rated at 248 mmBtus per hour (170,000 lbs. of steam per hour). The High School Boilers are both rated at 36 mmBtus per hour (30,000 lbs. of steam per hour). None of the five boilers are subject to New Source Performance Standards.

Boilers 1A, 2A, and 3A, are individually equipped with continuous emission monitors (CEMs), for opacity, sulfur dioxide, and oxygen. The High School Boilers do not have any CEMs.

There are three steam-driven electric generating turbines at the facility with a total production capacity of 38 Megawatts.

Other air emission sources at the facility include a railcar/truck coal unloading station and an ash transfer system. The coal unloading station is considered an insignificant activity but will be included in the facility's fugitive dust control plan.

AMENDMENT DESCRIPTION:

This amendment is an administrative amendment to correct the control equipment listed for the ash conveying system. The original permit incorrectly listed the control equipment as a fabric filter, whereas the system is actually controlled by dust suppression by water spray.

The permit also establishes testing frequencies for Boilers 1A, 2A and 3A based on the margin of compliance recorded during performance testing. The permit also requires updating of the Fugitive Emission Control Plan to address fugitive emissions from the stockpiling of coal.

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/04/01

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 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
The Permittee shall comply with the General Conditions listed in Minn. R. 7007.0800, subp. 16.	Minn. R. 7007.0800, subp. 16
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
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)
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; Minn. R. 7007.0800, subp. 16(J)
Shutdown Notifications: Notify the Commissioner at least 24 hours in advance of a planned shutdown of any control equipment or process equipment if the shutdown would cause any increase in the emissions of any regulated air pollutant. If the owner or operator does not have advance knowledge of the shutdown, notification shall be made to the Commissioner as soon as possible after the shutdown. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 3. At the time of notification, the owner or operator shall inform the Commissioner of the cause of the shutdown and the estimated duration. The owner or operator shall notify the Commissioner when the shutdown is over.	Minn. R. 7019.1000, subp. 1
Breakdown Notifications: Notify the Commissioner within 24 hours of a breakdown of more than one hour duration of any control equipment or process equipment if the breakdown causes any increase in the emissions of any regulated air pollutant. The 24-hour time period starts when the breakdown was discovered or reasonably should have been discovered by the owner or operator. However, notification is not required in the circumstances outlined in Items A, B and C of Minn. R. 7019.1000, subp. 2. At the time of notification or as soon as possible thereafter, the owner or operator shall inform the Commissioner of the cause of the breakdown and the estimated duration. The owner or operator shall notify the Commissioner when the breakdown is over.	Minn. R. 7019.1000, subp. 2
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)
Operation of Monitoring Equipment: Unless otherwise noted in Tables A, B, and/or C, monitoring a process or control equipment connected to that process is not necessary during periods when the process is shutdown, or during checks of the monitoring systems, such as calibration checks and zero and span adjustments. If monitoring records are required, they should reflect any such periods of process shutdown or checks of the monitoring system.	Minn. R. 7007.0800, subp. 4(D)
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 or B.	Minn. R. ch. 7017
Performance Test: due 15 days after Startup of peat and/or wood waste combustion in EU 001, EU 002, or EU 003 to measure particulate matter emissions. The testing and all test-related activities shall be performed in accordance with Minn. R. ch. 7017.	Minn. R. 7017.2020, subp. 1
Limits set as a result of a performance test (conducted before or after permit issuance) apply until superseded as specified by Minn. R. 7017.2025 following formal review of a subsequent performance test on the same unit. This does not apply to EU 001 and EU 002. See requirements under EU 001 and EU 002 regarding operating limits based on performance test conditions.	Minn. R. 7017.2025

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/04/01

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 002

Notification of Deviations Endangering Human Health or the Environment: As soon as possible after discovery, notify the Commissioner or the state duty officer, either orally or by facsimile, of any deviation from permit conditions which could endanger human health or the environment.	Minn. R. 7007.0800, subp. 6(A)
Notification of Deviations Endangering Human Health or the Environment Report: Within 2 working days of discovery, notify the Commissioner in writing of any deviation from permit conditions which could endanger human health or the environment. Include the following information in this written description: 1. the cause of the deviation; 2. the exact dates of the period of the deviation, if the deviation has been corrected; 3. whether or not the deviation has been corrected; 4. the anticipated time by which the deviation is expected to be corrected, if not yet corrected; and 5. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the deviation.	Minn. R. 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 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 the end of each calendar year (April 1). To be submitted on a form approved by the Commissioner.	Minn. R. 7019.3000 through Minn. R. 7019.3010
Emission Fees: due 60 days after receipt of an MPCA bill.	Minn. R. 7002.0005 through Minn. R. 7002.0095
Inspections: The Permittee shall comply with the inspection procedures and requirements as found in Minn. R. 7007.0800, subp. 9(A).	Minn. R. 7007.0800, subp. 9(A)
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)
Noise: The Permittee shall comply with noise standards set forth in Minn. R. 7030.0010 to 7030.0080 at all times during operation of any emission units. This is a state requirement only and is not enforceable by the EPA Administrator or citizens under the Clean Air Act.	Minn. R. 7030.0010-7030.0080
Comply with Fugitive Emission 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, subd. 4a; Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/04/01

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 002

Subject Item: **GP 001 Boilers 1A, 2A, and 3A**

Associated Items: EU 001 Boiler No. 1A

EU 002 Boiler No. 2A

EU 003 Boiler No. 3A

What to do	Why to do it
Sulfur Dioxide: less than or equal to 2.06 lbs/million Btu heat input using 1-Hour Average basis when only two of the three boilers in GP 001 are operating. The limit individually applies to each boiler.	Minn. R. 7009.0020 to not cause or contribute to a violation of the sulfur doxide ambient air standard in Minn. R. 7009.0080
Sulfur Dioxide: less than or equal to 1.58 lbs/million Btu heat input using 1-Hour Average basis when all three boilers in GP 001 are operating. The limit individually applies to each boiler.	Minn. R. 7009.0020 to not cause or contribute to a violation of the sulfur doxide ambient air standard in Minn. R. 7009.0080
Fuel Usage Limit: The Permittee shall not combust more than a total of 500 pounds per year of oily cellulose-based sorbents (oily rags) in the emission units in GP 001.	Minn. R. 7007.0800, subp. 2
Fuel Usage Limit: The Permittee shall limit the total used oil combusted in the emission units in GP 001 to 5,000 gallons per year. The Permittee shall limit combustion of used oil to 5% of total heat input on an hourly basis in each emission unit, and as follows: EU 001: 77 gallons per hour EU 002: 77 gallons per hour EU 003: 86 gallons per hour	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/04/01

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 002

Subject Item: **EU 001 Boiler No. 1A**

Associated Items: CE 001 Electrostatic Precipitator - High Efficiency

GP 001 Boilers 1A, 2A, and 3A

MR 001

MR 002

MR 003

SV 001

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
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 a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60 minute period based on a one(1)-minute averaging period.	Minn. R. 7011.0510, subp. 2
Sulfur Dioxide: less than or equal to 4.0 lbs/million Btu heat input using 1-Hour Average . See GP 001 for additional SO2 emissions limits.	Minn. R. 7011.0510, subp. 1
Fuels Allowed: bituminous coal, subbituminous coal, wood waste, natural gas, peat, used oil, and oily cellulose-based sorbents (including rags).	Minn. R. 7007.0800, subp. 2
Fuel Usage Limitation: EU 001 shall not burn more than 80,000 tons per year of wood waste and peat combined on a monthly calculated 12-month rolling sum basis.	Minn. R. 7007.0800, subp. 2 to limit HAPs emissions from the facility to less than the major source level in 40 CFR Sections 63.2 and 70.2
Recordkeeping: by the 15th day of each month, the Permittee shall calculate and record EU 001 peat and wood usage for the previous month and the previous 12-month period.	Minn. R. 7007.0800, subp. 5
Performance Test: due before end of each 60 months starting 10/06/1999 to measure particulate matter emissions from EU 001. The performance tests shall be conducted at an interval not to exceed 60 months between tests. The first test required under this condition shall be conducted by 10/06/2004.	Minn. R. 7017.2020, subp. 1
Performance Test Notification (written): due 30 days before Performance Test	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before Performance Test	Minn. R. 7017.2030, subps. 2 and 3
Performance Test Pre-test Meeting: due 7 days before Performance Test	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after Performance Test	Minn. R. 7017.2035, subp. 1
Performance Test Report - Microfiche Copy: due 105 days after Performance Test	Minn. R. 7017.2035, subp. 2
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. 7017.2025, subp. 2(A) and 3(B)
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 to an 8-hour block average based on the following: (1) If the results of the performance test are greater than 80% of any applicable emission limit for which compliance is demonstrated, then boiler operation will be limited to the tested operating rate. (2) If results are less than or equal to 80% of all applicable emission limits for which compliance is demonstrated, 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. 7017.2025, subp. 3(B)

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/04/01

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 002

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. Maintain documentation of all STET operation to demonstrate compliance with this limit. 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 demonstrate compliance at 80% or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110% of the average rate achieved during that performance test. If performance test results demonstrate compliance at greater than 80% 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
Emissions Monitoring: The Permittee shall use a COMS to measure opacity emissions from EU 001.	Minn. R. 7017.1000, subp. 1; Minn. R. 7007.0800, subp. 2
COMS Monitoring Data: Owners or operators of all COMS shall reduce all data to one-minute averages. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the one-minute averaging period.	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: 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) exceed the twice specification of PS-1 of 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1000
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
Emissions Monitoring: The Permittee shall use a SO2 CEMS to measure SO2 emissions from EU 001.	Minn. R. 7017.1000, subp. 1; Minn. R. 7007.0800, subp. 2
CEMS Continuous Operation: Except for system breakdowns, repairs, calibration checks and zero and span adjustments, all CEMS shall be in continuous operation.	Minn. R. 7007.0800, subp. 2
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS.	Minn. R. 7007.0800, subp. 2; Minn. R. 7017.1000, subp. 5
CEMS Cylinder Gas Audit (CGA): due before end of each calendar half-year following CEM Certification Test . Conduct CGA at least 3 months apart and not greater than 8 months apart. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7007.0800, subp. 2
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test . If the relative accuracy is 15% or less the next CEMS RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix B and Appendix F.	Minn. R. 7007.0800, subp. 2
Recordkeeping: The owner or operator must retain records of all CEMS/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

01/04/01

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 002

Subject Item: **EU 002 Boiler No. 2A**

Associated Items: CE 002 Electrostatic Precipitator - High Efficiency

GP 001 Boilers 1A, 2A, and 3A

MR 004

MR 005

MR 006

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
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 a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60 minute period based on a one(1)-minute averaging period.	Minn. R. 7011.0510, subp. 2
Sulfur Dioxide: less than or equal to 4.0 lbs/million Btu heat input using 1-Hour Average . See GP 001 for additional SO2 emissions limits.	Minn. R. 7011.0510, subp. 1
Fuels Allowed: bituminous coal, subbituminous coal, wood waste, natural gas, peat, used oil, and oily cellulose-based sorbents (including rags).	Minn. R. 7007.0800, subp. 2
Fuel Usage Limitation: EU 002 shall not burn more than 80,000 tons per year of wood waste and peat combined on a monthly calculated 12-month rolling sum basis.	Minn. R. 7007.0800, subp. 2 to limit HAPs emissions from the facility to less than the major source level in 40 CFR Sections 63.2 and 70.2
Recordkeeping: by the 15th day of each month, the Permittee shall calculate and record EU 002 peat and wood usage for the previous month and the previous 12-month period.	Minn. R. 7007.0800, subp. 5
Performance Test: due before end of each 60 months starting 10/06/1999 to measure particulate matter emissions from EU 002. The peformance tests shall be conducted at an interval not to exceed 60 months between tests. The first test required under this condition shall be conducted by 10/06/2004.	Minn. R. 7017.2020, subp. 1
Performance Test Notification (written): due 30 days before Performance Test	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before Performance Test	Minn. R. 7017.2030, subps. 2 and 3
Performance Test Pre-test Meeting: due 7 days before Performance Test	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after Performance Test	Minn. R. 7017.2035, subp. 1
Performance Test Report - Microfiche Copy: due 105 days after Performance Test	Minn. R. 7017.2035, subp. 2
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. 7017.2025, subp. 2(A) and 3(B)
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 to an 8-hour block average based on the following: (1) If the results of the performance test are greater than 80% of any applicable emission limit for which compliance is demonstrated, then boiler operation will be limited to the tested operating rate. (2) If results are less than or equal to 80% of all applicable emission limits for which compliance is demonstrated, 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. 7017.2025, subp. 3(B)

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/04/01

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 002

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. Maintain documentation of all STET operation to demonstrate compliance with this limit. 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 demonstrate compliance at 80% or less of any applicable emission limits for any tested pollutant, STET operation is defined as operation beyond 110% of the average rate achieved during that performance test. If performance test results demonstrate compliance at greater than 80% 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
Emissions Monitoring: The Permittee shall use a COMS to measure opacity emissions from EU 002.	Minn. R. 7017.1000, subp. 1; Minn. R. 7007.0800, subp. 2
COMS Monitoring Data: Owners or operators of all COMS shall reduce all data to one-minute averages. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the one-minute averaging period.	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: 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) exceed the twice specification of PS-1 of 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1000
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
Emissions Monitoring: The Permittee shall use a SO2 CEMS to measure SO2 emissions from EU 002.	Minn. R. 7017.1000, subp. 1; Minn. R. 7007.0800, subp. 2
CEMS Continuous Operation: Except for system breakdowns, repairs, calibration checks and zero and span adjustments, all CEMS shall be in continuous operation.	Minn. R. 7007.0800, subp. 2
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS.	Minn. R. 7007.0800, subp. 2; Minn. R. 7017.1000, subp. 5
CEMS Cylinder Gas Audit (CGA): due before end of each calendar half-year following CEM Certification Test . Conduct CGA at least 3 months apart and not greater than 8 months apart. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7007.0800, subp. 2
CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test . If the relative accuracy is 15% or less the next CEMS RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix B and Appendix F.	Minn. R. 7007.0800, subp. 2
Recordkeeping: The owner or operator must retain records of all CEMS/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

01/04/01

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 002

Subject Item: **EU 003 Boiler No. 3A**

Associated Items: CE 003 Electrostatic Precipitator - High Efficiency

GP 001 Boilers 1A, 2A, and 3A

MR 007

MR 008

MR 009

SV 003

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
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 a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60 minute period based on a one(1)-minute averaging period.	Minn. R. 7011.0510, subp. 2
Sulfur Dioxide: less than or equal to 4.0 lbs/million Btu heat input using 1-Hour Average . See GP 001 for additional SO2 emissions limits.	Minn. R. 7011.0510, subp. 1
Fuels Allowed: bituminous coal, subbituminous coal, wood waste, natural gas, peat, used oil, and oily cellulose-based sorbents (including rags).	Minn. R. 7007.0800, subp. 2
Fuel Usage Limitation: EU 003 shall not burn more than 80,000 tons per year of wood waste and peat combined on a monthly calculated 12-month rolling sum basis.	Minn. R. 7007.0800, subp. 2 to limit HAPs emissions from the facility to less than the major source level in 40 CFR Sections 63.2 and 70.2
Recordkeeping: by the 15th day of each month, the Permittee shall calculate and record EU 003 peat and wood usage for the previous month and the previous 12-month period.	Minn. R. 7007.0800, subp. 5
Performance Test: due before end of each 60 months starting 10/06/1999 to measure particulate matter emissions from EU 003. The performance tests shall be conducted at an interval not to exceed 60 months between tests. The first test required under this condition shall be conducted by 10/06/2004.	Minn. R. 7017.2020, subp. 1
Performance Test Notification (written): due 30 days before Performance Test	Minn. R. 7017.2030, subp. 1
Performance Test Plan: due 30 days before Performance Test	Minn. R. 7017.2030, subps. 2 and 3
Performance Test Pre-test Meeting: due 7 days before Performance Test	Minn. R. 7017.2030, subp. 4
Performance Test Report: due 45 days after Performance Test	Minn. R. 7017.2035, subp. 1
Performance Test Report - Microfiche Copy: due 105 days after Performance Test	Minn. R. 7017.2035, 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
Emissions Monitoring: The Permittee shall use a COMS to measure opacity emissions from EU 003.	Minn. R. 7017.1000, subp. 1; Minn. R. 7007.0800, subp. 2
COMS Monitoring Data: Owners or operators of all COMS shall reduce all data to one-minute averages. Opacity averages shall be calculated from all equally spaced consecutive 10-second (or shorter) data points in the one-minute averaging period.	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: 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) exceed the twice specification of PS-1 of 40 CFR pt. 60, Appendix B.	Minn. R. 7017.1000
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
Emissions Monitoring: The Permittee shall use a SO2 CEMS to measure SO2 emissions from EU 003.	Minn. R. 7017.1000, subp. 1; Minn. R. 7007.0800, subp. 2
CEMS Continuous Operation: Except for system breakdowns, repairs, calibration checks and zero and span adjustments, all CEMS shall be in continuous operation.	Minn. R. 7007.0800, subp. 2
CEMS Daily Calibration Drift (CD) Test: The CD shall be quantified and recorded at zero (low-level) and upscale (high-level) gas concentrations at least once daily. The CEMS shall be adjusted whenever the CD exceeds twice the specification of 40 CFR pt. 60, Appendix B. 40 CFR pt. 60, Appendix F, shall be used to determine out-of-control periods for CEMS.	Minn. R. 7007.0800, subp. 2; Minn. R. 7017.1000, subp. 5
CEMS Cylinder Gas Audit (CGA): due before end of each calendar half-year following CEM Certification Test . Conduct CGA at least 3 months apart and not greater than 8 months apart. Follow the procedures in 40 CFR pt. 60, Appendix F.	Minn. R. 7007.0800, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 002

CEMS Relative Accuracy Test Audit (RATA): due before end of each calendar year following CEM Certification Test . If the relative accuracy is 15% or less the next CEMS RATA is not due for 24 months. Follow the procedures in 40 CFR pt. 60, Appendix B and Appendix F.	Minn. R. 7007.0800, subp. 2
Recordkeeping: The owner or operator must retain records of all CEMS/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

01/04/01

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 002

Subject Item: **EU 004 Ash Conveying System**

Associated Items: CE 004 Dust Suppression by Water Spray

SV 004

What to do	Why to do it
Total Particulate Matter: less than or equal to 0.3 grains/dry standard cubic foot unless required to further reduce emissions to the less stringent limit of either Minn. R. 7011.0730 or Minn. R. 7011.0735.	Minn. R. 7011.0715, subp. 1(A)
Opacity: less than or equal to 20 percent opacity	Minn. R. 7011.0715, subp. 1(B)
Visible Emissions Monitoring: The Permittee shall perform a visible emissions check on EU 004 once each day while in operation (during daylight hours). A visible emissions check shall consist of viewing the exhaust gas exiting the stack and recording whether visible emissions are present or not.	Minn. R. 7007.0800, subp. 2, Minn. R. 7007.0800, subp. 4, and Minn. R. 7007.0800, subp. 5
Visible Emissions 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
Visible Emissions 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

01/04/01

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 002

Subject Item: **EU 005 High School Boiler 1**

Associated Items: SV 005

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
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 a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60 minute period based on a one(1)-minute averaging period.	Minn. R. 7011.0510, subp. 2

TABLE A: LIMITS AND OTHER REQUIREMENTS

01/04/01

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 002

Subject Item: **EU 006 High School Boiler 2**

Associated Items: SV 006

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
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 a maximum of 40 percent opacity shall be permissible for four additional minutes in any 60 minute period based on a one(1)-minute averaging period.	Minn. R. 7011.0510, subp. 2

TABLE B: SUBMITTALS

01/04/01

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 002

Table B lists most of the submittals required by this permit. Please note that some submittal requirements may appear in Table A or, if applicable, within a compliance schedule located in Table C. Table B is divided into two sections in order to separately list one-time only and recurrent submittal requirements.

Each submittal must be postmarked or received by the date specified in the applicable Table. Those submittals required by parts 7007.0100 to 7007.1850 must be certified by a responsible official, defined in Minn. R. 7007.0100, subp. 21. Other submittals shall be certified as appropriate if certification is required by an applicable rule or permit condition.

Send any application for a permit or permit amendment to:

Permit Technical Advisor
Permit Section
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Also, where required by an applicable rule or permit condition, send to the Permit Technical Advisor notices of:
- accumulated insignificant activities,
- installation of control equipment,
- replacement of an emissions unit, and
- changes that contravene a permit term.

Unless another person is identified in the applicable Table, send all other submittals to:

Supervisor
Compliance Determination Unit
Air Quality Division
Minnesota Pollution Control Agency
520 Lafayette Road North
St. Paul, Minnesota 55155-4194

Send submittals that are required to be submitted to the U.S. EPA regional office to:

Mr. George Czerniak
Air and Radiation Branch
EPA Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

Send submittals that are required by the Acid Rain Program to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue NW (6204N)
Washington, D.C. 20460

TABLE B: ONE TIME SUBMITTALS OR NOTIFICATIONS

01/04/01

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 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
Computer Dispersion Modeling Protocol	due 1,096 days after 09/12/1997 for PM-10, SO2, and NOx. The protocol shall 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 if necessary.	Total Facility
Computer Dispersion Modeling Results	due 1,462 days after 09/12/1997 for emissions of PM-10, SO2, and NOx.	Total Facility
Fugitive Control Plan	due 60 days after Permit Issuance. This Fugitive Control Plan shall update the existing plan to address fugitive emissions from the stockpiling of coal. The plan shall identify all fugitive emission sources, primary and contingent control measures and record keeping. The plan is subject to review and approval by the Commissioner.	Total Facility
Notification	due 30 days before Startup of peat and or wood waste combustion in EU 001, EU 002, or EU 003. The notification shall indicate the fuel(s) to be burned, and the boiler(s) that the fuel(s) will be burned in.	Total Facility
Relative Accuracy Test Audit (RATA) Notification	due 30 days before CEMS Relative Accuracy Test Audit (RATA)	EU001, EU002, EU003

TABLE B: RECURRENT SUBMITTALS

01/04/01

Facility Name: Hibbing Public Utilities

Permit Number: 13700027 - 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 Permit Issuance (Submit Deviations Reporting Form DRF-1 as amended). The EERs shall indicate all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdowns, and malfunctions.	EU001, EU003
Excess Emissions/Downtime Reports (EER's)	due 30 days after end of each calendar quarter following Permit Issuance (Submit Deviations Reporting Form DRF-1 as amended). The EER's shall indicate all periods of exceedances of the limit including exceedances allowed by an applicable standard, i.e. during startup, shutdowns, and malfunctions.	EU002
Relative Accuracy Test Audit (RATA) Results Summary	due 30 days after end of each calendar quarter following CEMS Relative Accuracy Test Audit (RATA)	EU001, EU002, EU003
CEMS Cylinder Gas Audit (CGA) Report	due 30 days after end of each calendar half-year following CEMS Cylinder Gas Audit (CGA)	EU001
CEMS Cylinder Gas Audit (CGA) Report	due 30 days after end of each calendar half-year following CEMS Cylinder Gas Audit (CGA)	EU002
CEMS Cylinder Gas Audit (CGA) Report	due 30 days after end of each calendar half-year following CEMS Cylinder Gas Audit (CGA)	EU003
COMS Calibration Error Audit Report	due 30 days after end of each calendar half-year following COMS Calibration Error Audit	EU001
COMS Calibration Error Audit Report	due 30 days after end of each calendar half-year following COMS Calibration Error Audit	EU002
COMS Calibration Error Audit Report	due 30 days after end of each calendar half-year following COMS Calibration Error Audit	EU003
Semiannual Deviations Report	due 30 days after end of each calendar half-year starting 09/12/1997. The first report of each calendar year covers January 1 - June 30. The second report of each calendar year covers July 1 - December 31. If no deviations have occurred, the Permittee shall submit the report stating no deviations.	Total Facility
Compliance Certification	due 30 days after end of each calendar year starting 09/12/1997 (for the previous calendar year). To be submitted on a form approved by the Commissioner. The report covers all deviations experienced during the calendar year. A copy of this report shall also be submitted to the US EPA Regional Office.	Total Facility

January 4, 2001

Mr. Gordon Bigham, P.E.
Director of Power Production
City of Hibbing
P. O. Box 249
Hibbing, MN 55746

RE: Air Emission Permit No. 13700027-002

Dear Mr. Bigham:

The enclosed permit, Air Emission Permit No. 13700027-002, authorizes operation of your facility located at 1832 Sixth Ave East, Hibbing, St. Louis County, Minnesota.

The permit was amended in response to your application for an administrative amendment to the permit. As requested in your application, the control equipment for the ash conveying system was corrected from a fabric filter to dust suppression by water spray. In addition, the following changes have been made to the permit:

- The "Permit Shield" language has been changed.
- Certain "Total Facility" conditions starting on page A-1 have been changed. The conditions include the conditions relating to shutdowns, breakdowns, operating/production limits based on compliance testing, the two conditions relating to notification of deviations endangering human health or the environment, and inspections. A condition requiring compliance with the Fugitive Emission Control Plan has also been added.
- Testing frequencies for Boilers 1A, 2A and 3A have been established based on the margin of compliance recorded during performance testing.
- The requirement to submit an emissions inventory report was moved to page A-2.
- The amended permit requires submittal of a Fugitive Emission Control Plan which addresses fugitive emissions from the stockpiling of coal.

The amendment is effective from the issuance date of the amendment until the expiration date of the permit. 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 limitations in the permit. If appropriate, post the permit at the facility.

We appreciate your cooperation and compliance with environmental laws. If you have questions about the permit, please contact me at (651) 296-8766.

Sincerely,

Craig D. Thorstenson
Staff Engineer
North/South Major Facilities

CDT:smd

Enclosure

cc: Bob Beresford, MPCA, Duluth Office
AQ File No. 659