

Volume IV
Chapter 56

STATE OF MONTANA
AIR QUALITY CONTROL
IMPLEMENTATION PLAN

Subject: Yellowstone County
Air Pollution
Control Program

56.9.4.4 EXHIBIT A - EMISSION LIMITATIONS AND CONDITIONS - MONTANA
POWER COMPANY, J.E. CORETTE & F. BIRD PLANT, BILLINGS,
MONTANA

Replace Pages:

Dated:

June 12, 1998

Page: 1 of 19

STATE OF MONTANA
AIR QUALITY CONTROL
IMPLEMENTATION PLAN

Subject: Yellowstone County
Air Pollution
Control Program

EXHIBIT A

EMISSION LIMITATIONS AND CONDITIONS

Montana Power Company, J.E. Corette Plant & F. Bird Plant
Billings, Montana

SECTION 1. AFFECTED FACILITIES

(A) Plant Location:

The J.E. Corette and F. Bird Plants are located ½ mile east of Billings adjacent to the Yellowstone River. The plants are located in Yellowstone County, Township 1 South, Range 26 East, center of Section 2.

(B) Affected Equipment and Facilities:

- (1) Main boiler - J.E. Corette Plant
- (2) F. Bird Plant

SECTION 2. DEFINITIONS

(A) The following definitions apply throughout this Stipulation and Exhibit A.

- (1) "Annual Emissions" means the amount of SO₂ emitted in a calendar year, expressed in pounds per year rounded to the nearest pound.

Where:

$$[\text{Annual Emissions}] = \Sigma [\text{Daily Emissions}]$$

- (2) "Attachment #1" means "Additional Performance Specifications For Stack Flow Rate Monitors" attached to this Exhibit and incorporated herein by reference.
- (3) "Buoyancy Flux" (Hourly Buoyancy Flux) means a stack plume rise parameter, to be determined on an hourly basis, and defined by the following equation:

$$F = \frac{2.45 VD^2 (T_s - T)}{T_s}$$

Replace Pages:

Dated:

June 12, 1998

Page: 2 of 19

STATE OF MONTANA
AIR QUALITY CONTROL
IMPLEMENTATION PLAN

Subject: Yellowstone County
Air Pollution
Control Program

Where:

- F = Hourly Buoyancy Flux in m^4/sec^3 ;
V = Hourly Average stack gas exit velocity in meters per second at actual conditions obtained from either the primary (CEMS) or backup temperature and flowrate monitoring system;
D = inside stack-top diameter in meters (3.51 meters);
 T_s = Hourly Average stack gas temperature in degrees Kelvin obtained from either the primary (CEMS) or backup temperature and flowrate monitoring system; and
T = ambient air temperature in degrees Kelvin.

The ambient air temperature used in all Buoyancy Flux calculations required by this control plan shall be $8.0^\circ C$ ($281.2^\circ K$), the Billings annual average ambient temperature.

MPC shall maintain an Hourly Buoyancy Flux of:

$$F_{MIN} = 144.6 m^4/sec^3 \leq F \leq 448.57 m^4/sec^3 = F_{MAX}$$

During plant startup, shutdown, or during any malfunction as defined in ARM 17.8.106, MPC may operate with a Buoyancy Flux less than the minimum of $144.6 m^4/sec^3$ provided the requirements of ARM 17.8.106 are met and the actual Buoyancy Flux is used to determine the appropriate emission limitation.

The stack parameters associated with the minimum and maximum F are:

$$T_{MIN} = 339.67^\circ K \ \& \ V_{MIN} = 27.74 \text{ meters/second}$$
$$T_{MAX} = 449.67^\circ K \ \& \ V_{MAX} = 39.62 \text{ meters/second.}$$

Whenever the CEMS-derived stack parameters "V" and/or " T_s " are unavailable to determine a Buoyancy Flux "F", a substituted Hourly Buoyancy Flux shall be used. The substituted Hourly Buoyancy Flux shall be determined from data derived from the backup temperature and flowrate monitoring system required by Section 6(B)(3) which:

- (a) by itself meets the specifications, operating requirements, and quality assurance and control requirements of Section 6 and Section 2(A)(8) and is designed to achieve a temporal sampling resolution of at least one temperature and flowrate measurement per minute; or
- (b) in combination with the primary CEMS meets the specifications, operating requirements, and quality assurance and control requirements of Section 6 and Section 2(A)(6 and 8).

Replace Pages:

Dated:

June 12, 1998

Page: 3 of 19

The backup temperature and flowrate monitoring system equipment is only required to operate when the primary temperature and flowrate monitoring system equipment (those components of the CEMS required by Section 6(B)(2)) has failed and is determined to be unable to obtain and record Hourly Average temperature and flow rate data.

In the absence of such data a substitute Hourly Buoyancy Flux "F" shall be the average "F" determined for a period immediately prior to the loss of the stack parameters "V" and/or "T_s" that is equal in length to the time period over which stack parameters "V" and/or "T_s" are unavailable. That time period, called the "look-back" period, is measured in increments of Calendar Days.

Specifically, the substituted Hourly Buoyancy Flux "F" shall be the hourly average Buoyancy Flux "F" determined for the applicable "look-back" period. The applicable "look-back" period is a period, measured in Calendar Day increments, which is equal to the number of consecutive Calendar Days during which one or more hours of the stack parameters "V" and/or "T_s" are unavailable. The applicable "look-back" period begins with the Calendar Day immediately preceding the Calendar Day in which the stack parameters "V" and/or "T_s" first became unavailable and continues backward in time for the number of Calendar Days equal to the number of Calendar Days during which one or more hours of the stack parameters "V" and/or "T_s" are unavailable.

For example, if stack parameters "V" and/or "T_s" are unavailable for a period beginning at 10:59 p.m. on January 3rd and ending at 1:01 a.m. January 5th, the applicable look-back periods would be:

- for the 24th hour of Calendar Day January 3rd, the look-back period would be one Calendar Day - in this case January 2nd;
- for each hour of Calendar Day January 4th, the look-back period would be two Calendar Days - in this case January 1st and January 2nd;
- for the 1st hour of Calendar Day, January 5th, the look-back period would be three Calendar Days - in this case December 31st, January 1st and January 2nd.

Substituted values for Buoyancy Flux may not be used to satisfy MPC's Quarterly Data Recovery Rate unless the data is derived from the backup temperature and flowrate monitoring system required by Section 6(B)(3) or by backup equipment that by itself or in combination with the primary CEMS meets the specifications, operating requirements, and quality assurance and control requirements of Section 6 and Section 2(A)(6 and 8).

The Buoyancy Flux for any three hour period, "F₃", shall be determined by averaging the Hourly Buoyancy Fluxes for the three hour period.

Replace Pages:

June 12, 1998

Dated:

Page: 4 of 19

$F_3 = \frac{\Sigma \text{Hourly Buoyancy Fluxes (F) for the Three Hour Period}}{3}$

3

When an Hourly Buoyancy Flux value is unavailable due to failure of both the primary (CEMS) and backup temperature and flowrate monitoring systems, MPC shall use the substitution procedure for "F" defined above.

- (4) "Calendar Day" means a 24-hour period starting at 12:00 midnight and ending at 12:00 midnight, 24 hours later.
- (5) "Clock Hour" means one twenty-fourth (1/24) of a Calendar Day and refers to any of the standard 60-minute periods in a day which are generally identified and separated on a clock by the whole numbers one through twelve.
- (6) "Continuous Emission Monitoring System (CEMS)" means all equipment necessary to obtain an Hourly SO₂ Emission Rate, provided each SO₂ concentration and stack gas volumetric flow rate monitor is designed to achieve a temporal sampling resolution of at least one concentration or flow rate measurement per minute. Such equipment includes a continuous emission monitor (CEM) which determines sulfur dioxide concentrations in a stack gas, a continuous stack gas volumetric flow rate monitor which determines stack gas flow rates, and associated data acquisition equipment.
- (7) "Daily Emissions" means the amount of SO₂ emitted in a Calendar Day, expressed in pounds per day and rounded to the nearest pound.

Where:

[Daily Emissions] = Σ [Three Hour Emissions]

Each Calendar Day is comprised of eight non-overlapping 3-hour periods. The Three Hour Emissions from all 3-hour periods in a Calendar Day shall be used to determine that day's emissions.

- (8) "Hourly Average" means an arithmetic average of all Valid and complete 15-minute data blocks in a Clock Hour. Four (4) Valid and complete 15-minute data blocks are required to determine an Hourly Average for each monitor and source per Clock Hour.

Exclusive of the above definition, an Hourly Average may be determined with two (2) Valid and complete 15-minute data blocks, for two of the 24 hours in any Calendar Day.

Replace Pages:

Dated:

June 12, 1998

Page: 5 of 19

STATE OF MONTANA
AIR QUALITY CONTROL
IMPLEMENTATION PLAN

Subject: Yellowstone County
Air Pollution
Control Program

A complete 15-minute data block for each sulfur dioxide continuous emission monitor, stack gas temperature monitor, and stack gas flow rate monitor shall have a minimum of one (1) data point value; however, each monitor shall be operated such that all Valid data points acquired in any 15-minute block shall be used to determine that 15-minute block's reported concentration and flow rate.

- (9) "Hourly SO₂ Emission Rate" means the pounds per Clock Hour of SO₂ emissions from a stack determined using Hourly Averages and rounded to the nearest one tenth of a pound.

For stack systems, SO₂ concentrations shall be measured in parts per million (PPM) on either a wet or dry basis.

- (a) If the SO₂ concentration is measured on a wet basis, MPC shall calculate the Hourly SO₂ Emission Rate using the following equation:

$$E_H = K * C_H * Q_H$$

Where:

E_H = Hourly SO₂ Emission Rate in pounds per hour and rounded to the nearest tenth of a pound;
 K = 1.663×10^{-7} in (pounds/SCF)/PPM;
 C_H = Hourly Average SO₂ concentration in PPM; and
 Q_H = stack gas Hourly Average volumetric flow rate, measured on an actual wet basis, converted to Standard Conditions, and reported in standard cubic feet per hour (SCFH).

- (b) If the SO₂ concentration is measured on a dry basis, MPC shall either install, operate, and maintain a continuous moisture monitor for measuring and recording the moisture content of the stack gases or determine the moisture content of the stack gases continuously (or on an hourly basis) and correct the measured hourly volumetric stack gas flow rates for moisture. MPC shall calculate the Hourly SO₂ Emission Rate using the following equation:

$$E_H = K * C_H * Q_H * \frac{(100 - \%H_2O)}{100}$$

Where:

E_H = Hourly SO₂ Emission Rate in pounds per hour and rounded to the nearest tenth of a pound;

Replace Pages:

Dated:

June 12, 1998

Page: 6 of 19

STATE OF MONTANA
AIR QUALITY CONTROL
IMPLEMENTATION PLAN

Subject: Yellowstone County
Air Pollution
Control Program

$K = 1.663 \times 10^{-7}$ in (pounds/SCF)/PPM;
 $C_H =$ Hourly Average SO_2 concentration in PPM (dry basis);
 $Q_H =$ stack gas Hourly Average volumetric flow rate, measured on an actual wet basis, converted to Standard Conditions, and reported in standard cubic feet per hour (SCFH); and
 $\%H_2O =$ Hourly Average stack gas moisture content, in percent by volume.

- (10) "Operating" means whenever an affected facility is starting up, shutting down, using fuel, or processing materials and SO_2 emissions are expected from the source or stack.
- (11) "Quarterly Data Recovery Rate" means the percentage of hours in a calendar quarter when CEMS derived Hourly SO_2 Emission Rate data are available for a stack in comparison to the number of corresponding Operating hours for that stack.

The Quarterly Data Recovery Rate (QDRR) for a stack shall be calculated in accordance with the following equation:

$$QDRR = \frac{VH}{OH} \times 100\%$$

Where:

VH = number of hours of Hourly SO_2 Emission Rate data that are also stack Operating hours in a calendar quarter;
OH = total number of stack Operating hours in a calendar quarter; and
QDRR = Quarterly Data Recovery Rate.

- (12) "Standard Conditions" means $20.0^\circ C$ ($293.2^\circ K$) at 1 atmosphere (760.0mm Hg) or $68.0^\circ F$ ($527.7^\circ R$) at 1 atmosphere (29.92" Hg).
- (13) "Three Hour Emissions" means the amount of SO_2 emitted in each of the eight non-overlapping three hour periods in a Calendar Day, expressed in pounds and rounded to the nearest pound.

Where:

$$[\text{Three Hour Emissions}] = \Sigma [\text{Hourly } SO_2 \text{ Emission Rates}]$$

Whenever Hourly SO_2 Emission Rates are unavailable and the facility is not Operating, zero pounds per hour shall be substituted for the missing Hourly SO_2 Emission Rates.

Replace Pages:

Dated:

June 12, 1998

Page: 7 of 19

- (14) "Valid" means data that is obtained from a monitor or meter serving as a component of the CEMS which meets the applicable specifications, operating requirements and quality assurance and control requirements of Section 6.

SECTION 3. EMISSION LIMITATIONS AND FACILITY MODIFICATIONS

(A) Emission Limitations

(1) Affected Sources:

(a) Main Boiler Stack;

(i) the Three Hour Emission Limitation (E_L) for SO_2 from the main boiler stack is dependent upon, and varies in accordance with, the Three Hour Average Buoyancy Flux (F_3) of the exhaust gas that is emitted from the main boiler stack (J.E. Corette).

(ii) Three Hour Emissions of SO_2 in pounds of SO_2 per three hours from the main boiler shall not exceed the value of the Three Hour Emission Limitation, E_L , as determined by the following equations:

$$\begin{aligned} \text{For } F_3 < 250.3; \quad E_L &= (4.882 * F_3) + 1202.4 \\ \text{For } F_3 \geq 250.3; \quad E_L &= (8.763 * F_3) + 230.9 \end{aligned}$$

Where:

F_3 = Three Hour Average Buoyancy Flux in m^4/sec^3 ; and
 E_L = Three Hour Emission Limitation for SO_2 in pounds of SO_2 per three hours.

(iii) Daily Emissions of SO_2 from the main boiler stack shall not exceed the sum of all of the Three Hour Emission Limitations, ΣE_L , for the eight non-overlapping three hour periods in a Calendar Day.

(iv) Annual Emissions of SO_2 from the main boiler stack shall not exceed 9,999,000 pounds per calendar year.

(v) Except as provided in Section 2(A)(3), Buoyancy Flux shall not be less than $144.6 m^4/sec^3$. Buoyancy Flux shall not exceed $448.57 m^4/sec^3$ at any time.

Replace Pages:

Dated:

June 12, 1998

Page: 8 of 19

STATE OF MONTANA
AIR QUALITY CONTROL
IMPLEMENTATION PLAN

Subject: Yellowstone County
Air Pollution
Control Program

- (b) Other Minor Sources;
 - (i) MPC shall utilize appropriate maintenance, repair, and operating practices to control emissions of sulfur bearing gases from minor sources such as ducts, stacks, valves, vents, vessels, and flanges which are not otherwise subject to this Stipulation and Exhibit A.

(B) Facility Modifications

- (1) By January 1, 1997, fuel oil burning capability shall be removed from the F. Bird Plant as follows:
 - (a) MPC shall remove the oil line that connects the fuel oil storage tank to the unloading station; and
 - (b) MPC shall fill the fuel oil delivery pipe that connects the loading station to the F. Bird Plant with concrete.

SECTION 4. COMPLIANCE DETERMINATIONS

- (A) Compliance with the emission limitations contained in Section 3(A)(1)(a) for the main boiler stack shall be determined by using data from the CEMS required by Section 6 (B)(1) and (2), and in accordance with the appropriate equation(s) in Section 2(A)(1), (3), (7), (9), and (13), except when CEMS data is not available as provided in Sections 2 (A)(3) and (13). Although the CEMS data is the method of demonstrating compliance on a continuous basis, the data from the testing required by Sections 5(A) or 6(C) and (D) shall also be used to demonstrate compliance.
- (B) In a letter dated October 7, 1994, MPC certified that the modifications required by Section 3(B) were complete. Compliance with the facility modification requirements contained in Section 3(B) shall be verified by the Department during the next annual inspection and whenever necessary, thereafter.
- (C) Compliance with the Quarterly Data Recovery Rate requirements.
 - (1) Compliance with the Quarterly Data Recovery Rate requirements contained in Section 6(A)(2) shall be determined in accordance with Section 2 (A)(11), with no exceptions for out-of-specification data or monitor downtime, except as provided in Section 6(A)(2).
 - (2) For quarters in which Operating hours are reduced (short quarters), a determination of whether MPC has violated the Quarterly Data Recovery Rate (QDRR) requirements in Section 6(A)(2)(b) shall include consideration of whether the reduced Operating hours made compliance with Section

Replace Pages:

Dated:

June 12, 1998

Page: 9 of 19

STATE OF MONTANA
AIR QUALITY CONTROL
IMPLEMENTATION PLAN

Subject: Yellowstone County
Air Pollution
Control Program

6(A)(2)(b) unreasonable.

- (3) Upon determination that the CEMS is not functioning properly, MPC shall implement short term corrective measures, and if necessary, long term corrective measures to accomplish, as expeditiously as practicable, either:
- (a) correction of the failure; or
 - (b) development, installation (if necessary), testing, maintenance, and operation of a new CEMS or appropriate replacement portions of the affected CEMS.

SECTION 5. EMISSION TESTING

- (A) In order to accurately determine the sulfur dioxide emission rate in pounds per hour for the main boiler stack, MPC shall perform annual source testing using EPA approved methods (40 CFR Part 60, Appendix A, Methods 1-4 and 6/6C as appropriate for this Stipulation and Exhibit A) or an equivalent method approved by the Department and EPA, and in accordance with the Montana Source Testing Protocol (ARM 17.8.106). The annual or semiannual Relative Accuracy Test Audits (RATAs) required by Sections 6 (C) and (D) may be substituted for the annual source tests provided that the flow rate RATA and the concentration RATA are performed simultaneously and additional calculations are made to determine and report the data in pounds per hour of sulfur dioxide.
- (B) MPC shall notify the Department in writing of each annual source test a minimum of twenty-five (25) working days prior to the actual testing (unless otherwise specified by the Department).

SECTION 6. CONTINUOUS MONITORING

- (A) CEM Quarterly Data Recovery Rates
- (1) "Unusual Circumstances" means circumstances which are unforeseeable, beyond MPC's control, and which could not reasonably have been prevented or mitigated by MPC. Such circumstances may include but are not limited to earthquakes, power outages, or fire; but do not include failures of any monitoring or metering equipment or associated data acquisition equipment unless such failures meet the following conditions:
- (a) prior to the failure, the equipment was installed, operated, and maintained in accordance with the requirements of Section 6;

Replace Pages:

Dated:

June 12, 1998

Page: 10 of 19

STATE OF MONTANA
AIR QUALITY CONTROL
IMPLEMENTATION PLAN

Subject: Yellowstone County
Air Pollution
Control Program

- (b) upon failure, MPC initiates the short term corrective measures and, as necessary, the long term corrective measures required by Section 4(C)(3);
 - (c) within two working days of occurrence, MPC notifies the Department's Permitting and Compliance Division by telephone of the occurrence of Unusual Circumstances, as defined herein; and
 - (d) MPC demonstrates, by utilizing properly signed contemporaneous CEMS operating logs and other relevant evidence, in the first quarterly report following the failure that the failure meets the above conditions.
- (2) Quarterly Data Recovery Rates
- (a) Notwithstanding the QDRR requirements specified in Section 6(A)(2)(b), whenever a source or stack is Operating, MPC shall use best efforts to operate the associated CEMS in a manner to achieve the highest Quarterly Data Recovery Rate (QDRR) that is technically feasible.
 - (b) At a minimum, MPC shall achieve the following QDRR requirements, unless prevented by Unusual Circumstances or by reduced Operating hours as provided in Section 4(C)(2):
 - (i) for the main boiler stack CEMS, MPC shall achieve a QDRR of equal to or greater than 90%. Valid data obtained from backup temperature and flow rate monitoring system equipment in combination with data from the primary sulfur dioxide continuous emission monitor shall count towards meeting this requirement.
 - (c) In its evaluation of whether MPC used best efforts to achieve the highest QDRR technically feasible, the Department will consider:
 - (i) the design capabilities of the CEMS, and whether:
 - (ii) MPC has properly operated and maintained the CEMS, including the maintenance of an adequate spare parts inventory;
 - (iii) MPC has complied with the quality assurance requirements described in Section 6;
 - (iv) MPC has taken timely and appropriate action to correct a failure in the CEMS;

Replace Pages:

June 12, 1998

Dated:

Page: 11 of 19

STATE OF MONTANA
AIR QUALITY CONTROL
IMPLEMENTATION PLAN

Subject: Yellowstone County
Air Pollution
Control Program

and

(v) Unusual Circumstances have occurred, as defined in Section 6 (A)(1).

(B) Affected Sources

- (1) By July 1, 1997, MPC shall operate and maintain a continuous emission monitor to measure sulfur dioxide concentrations from the main boiler stack.
- (2) By July 1, 1997, MPC shall operate and maintain a continuous stack flow rate monitor and temperature monitor (at a minimum, a thermocouple) to measure the stack gas flow rates from the main boiler stack.
- (3) By January 1, 1999, or a date 6 months after EPA approval of the Buoyancy Flux monitoring requirements contained in this document (whichever date is later), MPC shall install and maintain a backup temperature and flowrate monitoring system for the main boiler stack. The back-up temperature and flowrate monitoring system shall be capable of obtaining and recording stack parameters to determine "V" and/or "T_s" in the event of the failure of the primary temperature and flowrate monitoring system which is a component of the CEMS required by Section 6(B)(2) and shall meet the performance specifications contained in Section 2(A)(3). However, the back-up system may rely upon the in-stack pitot tube and associated mechanical connections that are components of the primary temperature and flowrate monitoring system up to, but not including, the transducer.

For purposes of compliance with this requirement, the backup monitoring equipment shall include as a minimum a differential pressure transducer, a thermocouple, and either:

- (a) chart recorder(s) capable of recording "T_s" and pitot tube differential pressure, or
- (b) a data logger capable of recording "T_s" and the calculated "V", the calculated flowrate, or the pitot tube differential pressure necessary to calculate "V" and flowrate.

Upon installation, MPC shall operate the backup temperature and flowrate monitoring system whenever the primary (CEMS) temperature and flowrate monitoring system is determined to have failed.

(C) CEM Performance Specifications

- (1) All continuous SO₂ concentration monitors required by this control plan shall:

Replace Pages:

Dated:

June 12, 1998

Page: 12 of 19

STATE OF MONTANA
AIR QUALITY CONTROL
IMPLEMENTATION PLAN

Subject: Yellowstone County
Air Pollution
Control Program

- (a) be installed, certified, operated, and maintained in accordance with the performance standards in 40 CFR Part 75, Appendices A and B; and
 - (b) be subject to and meet the quality assurance (QA) and quality control (QC) procedures in 40 CFR Part 75, Appendices A and B, except that at least one of the daily zero/spans per calendar week must be conducted using certified calibration gas.
- (2) MPC shall notify the Department in writing of each Relative Accuracy Test Audit a minimum of twenty-five (25) working days prior to the actual testing (unless otherwise specified by the Department).
- (D) Stack Gas Flow Rate Monitor Performance Specifications
- (1) All continuous stack gas flow rate monitors required by this control plan shall:
 - (a) be installed, certified, operated and maintained in accordance with 40 CFR Part 75, Appendices A and B; and
 - (b) be subject to and meet the quality assurance and quality control requirements of 40 CFR Part 75, Appendices A and B and the additional requirements of Department Method B-1 of Attachment 1.

SECTION 7. DATA REPORTING REQUIREMENTS

- (A) MPC shall submit quarterly reports on a calendar year basis, beginning with the first calendar quarter of 1998. The quarterly reports shall be submitted within 30 days of the end of each calendar quarter. The quarterly reports shall be submitted to the Department's Permitting and Compliance Division office in Helena and the Billings Regional Office. The quarterly report format shall consist of both a comprehensive electronic-magnetic report and a written or hard copy data summary report.
- (B) The electronic report format and records structure shall require hourly CEMS data, stack temperature and calibration data to be submitted to the Department as required in Section 7(A). The data shall be submitted to the Department on magnetic or optical media, and such submittal shall follow the reporting format specified by the Department in 1996, as may be subsequently amended. The Department shall reserve the right to call for any necessary future revisions to the reporting format delineated in this Section.
 - (1) The electronic report shall contain the following:
 - (a) Hourly Average SO₂ concentrations in PPM from the main boiler-stack;

Replace Pages:

Dated:

June 12, 1998

Page: 13 of 19

STATE OF MONTANA
AIR QUALITY CONTROL
IMPLEMENTATION PLAN

Subject: ~~Yellowstone County
Air Pollution
Control Program~~

- (b) Hourly Average stack volumetric flow rates in SCFH from the main boiler stack;
 - (c) Hourly Average stack gas temperature in °F from the main boiler stack;
 - (d) Hourly SO₂ Emission Rates in pounds per Clock Hour from the main boiler stack;
 - (e) Hourly Buoyancy Flux ,F, in m⁴/sec³ and Three Hour Buoyancy Fluxes, F₃, in m⁴/sec³; and
 - (f) daily calibration data from the CEMS required by Section 6(B)(1) and (2), or, if applicable, Section 6(B)(3).
- (2) In addition to submitting the electronic-magnetic quarterly reports to the Department, MPC shall also record, organize and archive for at least five years the same data, and upon request by the Department, MPC shall provide the Department with any data archived in accordance with this Section.
- (C) The quarterly written report for the J.E. Corette Plant shall consist of summarized CEMS data for Daily Emissions, Three Hour Emission Limitations for SO₂ (as determined by the Buoyancy Flux F₃), Three Hour Emissions, Quarterly Data Recovery Rates and text regarding excess emissions.
- (1) The following data shall be recorded, organized, reported, and archived for a minimum of five years:
- (a) Three Hour Emission Limitations for SO₂ from the main boiler stack;
 - (b) Three Hour Emissions of SO₂ from the main boiler stack;
 - (c) Daily Emissions of SO₂ in pounds per Calendar Day from the main boiler stack;
 - (d) Daily Emission Limitations for SO₂ from the main boiler stack;
 - (e) the Quarterly Data Recovery Rate for the CEMS expressed in percent (Valid data obtained from backup temperature and flowrate monitors in combination with data from the primary sulfur dioxide continuous monitor shall count towards meeting the QDRR requirements.);
 - (f) the Operating hours during the calendar quarter for the source or units associated with the main boiler stack;

Replace Pages:

June 12, 1998

Dated:

Page: 14 of 19

STATE OF MONTANA
AIR QUALITY CONTROL
IMPLEMENTATION PLAN

Subject: Yellowstone County
Air Pollution
Control Program

- (g) the date and time identifying each period of continuous monitoring system downtime during the reporting period, including quality control and quality assurance checks, and the nature of system repairs or adjustments;
 - (h) the results of the quarterly CGA's or RAA's and flow rate checks, the annual or semiannual RATA's required in Sections 6(C) and (D), and the annual source tests required by Section 5(A); and
 - (i) any documentation which demonstrates that a CEMS failure meets the conditions of Unusual Circumstances.
- (2) For each Calendar Day on which any emission limitation(s) were exceeded, the written report shall identify the source or unit with excess emissions and include the following information in a report submittal as specified in Section 7(A):
- (a) total hours of Operation with excess emissions, the Hourly SO₂ Emission Rates, the Three Hour Emissions, the Three Hour Emission Limitations for SO₂, the Daily Emission Limitations for SO₂, and the Daily Emissions;
 - (b) all information regarding reasons for operating with excess emissions; and
 - (c) corrective actions taken to mitigate excess emissions.
- (D) Upon request from a representative of the Department, EPA or Yellowstone County Air Pollution Control, MPC shall provide Hourly SO₂ Emissions Rate data for any prior day not covered by the latest quarterly report from the main boiler stack.
- (E) By January 1, 2000, the Department shall reevaluate the reporting requirements of this Section and determine if revisions are necessary or desirable. The purpose of the reevaluation is to determine if the reporting requirements should be modified to more closely meet the informational needs of the Department and the public, and to reduce or simplify the requirements for MPC while still providing the necessary information. Any revisions shall be made only after consultation with MPC, consideration of the number and type of data requests made by the public, and the Department's emission inventory and compliance needs.

Replace Pages:

June 12, 1998

Dated:

Page: 15 of 19

STATE OF MONTANA
AIR QUALITY CONTROL
IMPLEMENTATION PLAN

Subject: Yellowstone County
Air Pollution
Control Program

SECTION 8. ADDITIONAL REQUIREMENTS AND CONDITIONS

Except as otherwise provided herein, nothing in this Stipulation, Exhibit A, or Attachment #1 shall be construed to alter MPC's obligation under any other applicable state, federal and local laws and regulations, orders, and permit conditions. In any enforcement proceeding pertaining to such other requirements, MPC reserves the right to raise any and all available equitable or legal defenses.

SECTION 9. GENERAL CONDITIONS

- (A) Inspection - For purposes of ensuring compliance with this Stipulation, Exhibit A, and Attachment #1, MPC shall, pursuant to 75-2-403, MCA, allow the Department representative(s) access to all SO₂ emitting sources at the MPC facility such that, the Department representative(s) may, pursuant to 75-2-403, MCA, enter and inspect, at any reasonable time, any property, premises, or place, except a private residence, on or at which an SO₂ emitting source is located or is being constructed or installed. The Department representatives shall be allowed to conduct surveys, collect samples, obtain emissions data, audit any monitoring equipment (CEMS), or observe any monitoring or testing, and conduct all other necessary functions related to this control plan.

As provided in Section 75-2-105, MCA, MPC may seek a court order declaring certain trade secret information as confidential and not a matter of public record. If MPC claims that certain information is entitled to trade secret protection, the Department shall maintain such information as confidential pending issuance of a court order under Section 75-2-105, MCA, provided that MPC initiate such court action within 14 days of delivering the information to the Department.

- (B) Enforcement - Any violation of a limitation, condition, or other requirement contained herein ("Stipulation Requirement") constitutes grounds for judicial or administrative enforcement action. If the incident causing the violation would also form the basis of a violation of ARM Title 17, Chapter 8, or of Title 75, Chapter 2, MCA, the Department shall not count the violation of the Stipulation Requirement as an additional or separate violation incident for penalty calculation and assessment purposes.

Replace Pages:

Dated:

June 12, 1998

Page: 16 of 19

STATE OF MONTANA
AIR QUALITY CONTROL
IMPLEMENTATION PLAN

Subject: Yellowstone County
Air Pollution
Control Program

ATTACHMENT 1
ADDITIONAL PERFORMANCE SPECIFICATIONS FOR STACK FLOW RATE
MONITORS

METHOD B-1
ADDITIONAL ONGOING QUALITY ASSURANCE AND QUALITY CONTROL
REQUIREMENTS FOR IN-STACK AND IN-DUCT FLOW MONITORS

1.0 FREQUENCY OF FLOW MONITOR TESTING

The requirements of this method are in addition to the requirements of 40 CFR Part 75. A summary chart showing each additional quality assurance test and the frequency at which each test is required is located at the end of this Method in Table 1.

1.1 Quarterly Flow Monitor Assessments

For each flow monitor, conduct a quarterly stack velocity and flow rate check by performing a velocity traverse and visual inspection of the annubar system. Perform the following assessments during each calendar quarter in which the unit operates. This requirement is effective as of the calendar quarter following the calendar quarter in which the flow monitor is provisional certified. The semiannual or annual Relative Accuracy Test Audits may substitute for the quarterly single velocity traverse checks.

1.1.1 Flow Monitor Flow Rate Check

Once during each operating quarter and for each flow monitor, perform a flow rate check by completing a single velocity traverse, calculating the associated average flow rate, and comparing the average flow with the concurrent flow measured by the continuous flow monitor. The flow rate check shall be performed at normal operating rates or load level. The flow rate check shall be performed in accordance with 40 CFR Part 75, Appendix A, Section 6.0 as appropriate for a single traverse. The difference (PD) between the average flow rate determined

Replace Pages:

Dated:

June 12, 1998

Page: 17 of 19

STATE OF MONTANA AIR QUALITY CONTROL IMPLEMENTATION PLAN	Subject: Yellowstone County Air Pollution Control Program
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by the single velocity traverse and the continuous flow monitor shall not exceed 15 percent (10% after January 1, 2000) as determined by equation B-1. If the single velocity traverse fails to meet the 15% (10% after January 1, 2000) difference specification, the owner/operator may conduct an additional single velocity traverse or a complete Relative Accuracy Test Audit (RATA) in accordance with 40 CFR Part 60, Appendix A, Section 6.0 in order to demonstrate compliance with the 15% (10% after January 1, 2000) difference or 15% (10 % after January 1, 2000) relative accuracy requirements.

$$PD = \frac{TF - FR}{TF} \times 100 \quad (\text{Eq. B-1})$$

Where:

- PD = Percent Difference;
- TF = Traverse Flow (scfh);
- FR = Continuous Flow Monitor Flow (scfh); and
- TF and FR are on a consistent moisture basis.

If the Relative Accuracy of the latest semiannual or annual Relative Accuracy Test Audit (RATA) conducted pursuant to 40 CFR Part 60, Appendix B, Section 2.3 is less than 10%, the single velocity traverse flow rate check may be discontinued. However, if future RATAs indicate a Relative Accuracy of 10% or greater, performance of the single velocity traverse flow rate check shall resume.

1.1.2 Flow Monitor Out-of-Control Period

An out-of-control period occurs when a flow monitor fails the quarterly flow rate check (the difference between the average flow rate determined by the velocity traverse and the continuous flow monitor exceeds 15% or 10% after January 1, 2000) or the visual inspection of the annubar system indicates a damaged or improperly operating annubar flow measuring device. The out-of-control period begins with the hour of the failed flow rate check or visual inspection and ends with the hour of a satisfactory flow rate check, RATA, or correction of the damage or

Replace Pages:	Dated:
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June 12, 1998

Page: 18 of 19

STATE OF MONTANA AIR QUALITY CONTROL IMPLEMENTATION PLAN	Subject: Yellowstone County Air Pollution Control Program
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improperly operating annubar flow measuring device. During any period that the flow monitor is out-of-control, the data may not be used in calculating emission compliance nor be counted towards meeting minimum data recovery requirements.

TABLE 1- ADDITIONAL FLOW MONITOR QUALITY ASSURANCE TEST REQUIREMENTS

Test	Weekly	Quarterly
Flow Check (single velocity traverse)		x ¹
Visual Inspection of Annubar System		x

¹ The owner/operator has an option to perform a RATA if the quarterly flow rate check (single traverse) fails specifications. In addition, if the Relative Accuracy determined by the latest RATA is less than 10%, the quarterly single velocity traverse flow rate check may be discontinued. However, if future RATAs indicate a Relative Accuracy of 10% or greater, performance of the quarterly single velocity traverse flow rate check shall resume.

Replace Pages:	Dated:
June 12, 1998	