



Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor

P. O. Box 200901

Helena, MT 59620-0901

(406) 444-2544

Website: www.deq.mt.gov

April 6, 2010

Thompson River Power, LLC
Scott Magie
701 E. Lake St, Suite 300
Wayzata, MN 55391

RE: Thompson River Power's Title V Operating Permit #OP3175-03

Dear Mr. Magie:

The Montana Department of Environmental Quality has prepared the enclosed Final Operating Permit #OP3175-03, for Thompson River Power, located in SW $\frac{1}{4}$, NW $\frac{1}{4}$, NE $\frac{1}{4}$ of Section 13, Township 21 North, Range 29 West in Sanders County, Montana. Please review the cover page of the attached permit for information pertaining to the action taking place on Permit #OP3175-03.

If you have any questions, please contact Jenny O'Mara, the permit writer, at (406) 444-1452 or by email at jenomara@mt.gov.

Sincerely,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-9741

Jenny O'Mara
Environmental Engineer
Air Resources Management Bureau
(406) 444-1452

VW:JO:KW

Enclosure

Cc: Christopher Ajayi, US EPA Region VIII 8P-AR
Betsy Wahl, US EPA – Helena
Eric Walther, Sierra Research, EWalther@sierraresearch.com

State of Montana
Department of Environmental Quality
Helena, Montana 59620

AIR QUALITY OPERATING PERMIT NUMBER OP3175-03

Modification Application Received: **May 30, 2008**
Application Deemed Administratively Complete: **February 25, 2009**
Application Deemed Technically Complete: **September 4, 2009**
AFS Number: 030-089-009A

Draft Issue Date: **December 10, 2009**
Proposed Issue Date: **January 13, 2010**
End of EPA 45-day Review: **March 1, 2010**
Date of Decision: **March 4, 2010**
Effective Date: **April 6, 2010**
Expiration Date: **August 28, 2012**

In accordance with the Montana Code Annotated (MCA) Sections 75-2-217 and 218, and the Administrative Rules of Montana (ARM) Title 17, Chapter 8, Subchapter 12, Operating Permit Program, ARM 17.8.1201, *et seq.*,

Thompson River Power, LLC
SW¹/₄, NW¹/₄, NE¹/₄ of Section 13, T21N, R29W
701 E. Lake St, Suite 300
Wayzata, MN 55391

hereinafter, referred to as “TRP”, is authorized to operate a stationary source of air contaminants consisting of the emission units described in this permit. Until this permit expires or is modified or revoked, TRP is allowed to discharge air pollutants in accordance with the conditions of this permit. All conditions in this permit are federally and state enforceable unless otherwise specified. Requirements which are state only enforceable are identified as such in the permit. A copy of this permit must be kept on site at the above named facility.

Permit Issuance and Appeal Process: In accordance with Section 75-2-218, MCA, the Department of Environmental Quality’s (Department) decision regarding issuance of an operating permit is not effective until 30 days have elapsed from the date of the decision issued March 4, 2010. The decision may be appealed to the Board of Environmental Review (Board) by filing a request for a hearing within 30 days after the date of decision. The filing of a request for hearing does not stay the Department’s decision, unless the Board orders a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-218(6)(b), MCA. If no stay is ordered, the Department’s decision on the application is final 30 days after the decision is made and the Department will send notification and a final permit cover page to be attached to this document stating that the permit is final. In addition, ARM 17.8.1233 allows for any person to petition the Environmental Protection Agency (EPA) within 60 days after the expiration of EPA’s 45-day review period to object to issuance of this operating permit. If EPA objects to the operating permit as a result of a petition prior to the Department’s notification of a final permit, TRP and all affected parties will be informed of the stay of a final permit. If the Department has already notified TRP and all affected parties, the Department shall issue a revised permit according to ARM 17.8.1231. Questions regarding the final issuance date and status of appeals should be directed to the Department at (406) 444-3490.

Montana Air Quality Operating Permit
Department of Environmental Quality

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Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit have the meaning assigned to them in the referenced regulations.

SECTION I. GENERAL INFORMATION

The following general information is provided pursuant to ARM 17.8.1210(1).

Company Name: Thompson River Power, LLC

Mailing Address: 701 E. Lake St., Suite 300

City: Wayzata

State: MN

Zip: 55391

Plant Location: SW¼, NW¼, NE¼ of Section 13, Township 21 North, Range 29 West in Sanders County, Montana. UTM Coordinates - Zone 11, Easting 631.6 kilometers (km), and Northing 5270.6 km.

Responsible Official: Scott Magie Phone: (605) 359-0200

Facility Contact Person: Scott Magie Phone: (605) 359-0200

Primary SIC Code: 4911

Nature of Business: Power (electrical) and Steam Generation

Description of Process: TRP operates a 16.5 megawatt (MW) coal/wood waste fired electricity and steam co-generation plant. The plant incorporates a 192.8 Million British Thermal Units per hour (MMBtu/hr) capacity Babcock & Wilcox Spreader Stoker Boiler (Boiler) capable of producing approximately 130,000 pounds of steam per hour. Most of the steam is sent to a turbine generator for the production of electricity to be sent to the power grid with a small percentage (up to 10%) of the steam and energy produced sent directly to Thompson River Lumber, Inc. (TRL), for use in the lumber dry kilns and general operations at the TRL sawmill. TRP will have a parasitic load (use) of approximately 0.4 MW.

The relationship between TRP and TRL is symbiotic; however, because the two sources are under separate ownership and control and are covered under separate Standard Industrial Classification (SIC) codes, the two sources are considered separate sources.

The Boiler is supported by a coal and wood fuel handling system, a cooling tower, a lime handling system (media for dry flue-gas desulfurization unit), an ash/fly ash handling system, a diesel or propane fired boiler pre-heater (60 MMBtu/hr), refractory brick curing heater(s) (60 MMBtu/hr), and various support trucks/vehicles. The Boiler will incorporate various emission control devices to limit potential pollutant emissions from the source, as described below.

The Boiler will use best management practices with over-fire air (OFA), flue gas recirculation (FGR), and selective non-catalytic reduction (SNCR) to control NO_x emissions, a combination of low sulfur coal (< 1% sulfur by weight and < 0.745 lb S/MMBtu) and a dry flue-gas desulfurization unit (Dry FGD) to control SO₂ emissions, a baghouse to control particulate matter (PM) and particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM₁₀) emissions, proper design and combustion to control carbon monoxide (CO) and volatile organic compound (VOC) emissions, and the combination of the Dry-FGD and baghouse controls to limit hydrochloric acid (HCl) gas emissions, sulfuric acid (H₂SO₄) emissions, and mercury (Hg) emissions. Boiler combustion gases will first enter the Dry FGD then pass through the Boiler baghouse and eventually vent to the atmosphere through the Boiler baghouse stack. The Boiler will fire low-sulfur coal and/or wood waste only, except during periods of startup and shutdown and boiler commissioning where propane or diesel fuel may be used for the boiler pre-heater.

SECTION II. SUMMARY OF EMISSION UNITS

The emission units regulated by this permit are the following [ARM 17.8.1211]:

Emissions Unit ID	Description	Pollution Control Device/Practice
EU001	Babcock & Wilcox Spreader Stoker Boiler (192.8 MMBtu/hr)	PM/PM ₁₀ – Baghouse (40,513 dscfm) SO ₂ – Dry FGD NO _x – OFA, SNCR, FGR HCl – Dry FGD / Baghouse H ₂ SO ₄ – Dry FGD / Baghouse Hg – Dry FGD / Baghouse
EU002	Fuel Storage and Handling Operations (Coal & Wood)	Enclosures, Fuel Handling Baghouse – DC1 and DC2 (2200 dscfm and 1000 dscfm, respectively)
EU004	Lime Storage and Handling Operations	Enclosures, Lime Silo Bin Vent Dust Collector – DC3 (1000 dscfm)
EU005	Ash/Fly Ash Storage and Handling Operations	Enclosures, Fly Ash Bin Vent Dust Collector – DC4 (1000 dscfm), Retractable Load-out Spout (Truck Transfer)
EU005	Boiler Pre-Heater (60 MMBtu/hr – Diesel or Propane-Fired)	500 hr/12-month rolling period Operational Limit
EU006	Refractory Curing Heater(s) (60 MMBtu/hr – Propane-Fired)	500 hr/12-month rolling period Operational Limit
EU007	Truck Traffic/Haul Roads	Paved Roads, Water and/or Chemical Dust Suppressant.
EU008	Emergency Generator/Engine (2220 hp)	200 hr/12-month rolling period Operational Limit

SECTION III. PERMIT CONDITIONS

The following requirements and conditions are applicable to the facility or to specific emission units located at the facility (ARM 17.8.1211, ARM 17.8.1212, and ARM 17.8.1213).

A. Facility-Wide

Conditions	Rule Citation	Rule Description	Pollutant/Parameter	Limit
A.1	ARM 17.8.105	Testing Requirements	Testing Requirements	-----
A.2	ARM 17.8.304(1)	Visible Air Contaminants	Opacity	40%
A.3	ARM 17.8.304(2)	Visible Air Contaminants	Opacity	20%
A.4	ARM 17.8.308(1)	Particulate Matter, Airborne	Fugitive Opacity	20%
A.5	ARM 17.8.308(2)	Particulate Matter, Airborne	Reasonable Precautions	-----
A.6	ARM 17.8.308	Particulate Matter, Airborne	Reasonable Precaution, Construction	20%
A.7	ARM 17.8.309	Particulate Matter, Fuel Burning Equipment	Particulate Matter	$E = 0.882 * H^{-0.1664}$ Or $E = 1.026 * H^{-0.233}$
A.8	ARM 17.8.310	Particulate Matter, Industrial Processes	Particulate Matter	$E = 4.10 * P^{0.67}$ or $E = 55 * P^{0.11} - 40$
A.9	ARM 17.8.322(4)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (liquid or solid fuels)	1 lb/MMBtu fired
A.10	ARM 17.8.322(5)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (gaseous)	50 gr/100 CF
A.11	ARM 17.8.324(3)	Hydrocarbon Emissions, Petroleum Products	Gasoline Storage Tanks	-----
A.12	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	65,000 Gallon Capacity	-----
A.13	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	Oil-effluent Water Separator	-----
A.14	ARM 17.8.342	NESHAPs General Provisions	SSM Plans	Submittal
A.15	ARM 17.8.1212	Reporting Requirements	Compliance Monitoring	-----
A.16	ARM 17.8.1207	Reporting Requirements	Annual Certification	-----

Conditions

A.1. Pursuant to ARM 17.8.105, any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct test, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

Compliance demonstration frequencies that list “as required by the Department” refer to ARM 17.8.105. In addition, for such sources, compliance with limits and conditions listing “as required by the Department” as the frequency, is verified annually using emission factors and engineering calculations by the Department’s compliance inspectors during the annual emission inventory review; in the case of Method 9 tests, compliance is monitored during the regular inspection by the compliance inspector.

A.2. Pursuant to ARM 17.8.304(1), TRP shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.

A.3. Pursuant to ARM 17.8.304(2), TRP shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.

- A.4. Pursuant to ARM 17.8.308(1), TRP shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.5. Pursuant to ARM 17.8.308(2), TRP shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter, unless otherwise specified by rule or in this permit.
- A.6. Pursuant to ARM 17.8.308, TRP shall not operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne particulate matter. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit.
- A.7. Pursuant to ARM 17.8.309, unless otherwise specified by rule or in this permit, TRP shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of the maximum allowable emissions of particulate matter for existing fuel burning equipment and new fuel burning equipment calculated using the following equations:

For existing fuel burning equipment (installed before November 23, 1968):
 $E = 0.882 * H^{-0.1664}$

For new fuel burning equipment (installed on or after November 23, 1968):
 $E = 1.026 * H^{-0.233}$

Where H is the heat input capacity in million British thermal units (MMBtu) per hour and E is the maximum allowable particulate emissions rate in pounds per MMBtu.

- A.8. Pursuant to ARM 17.8.310, unless otherwise specified by rule or in this permit, TRP shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the outdoor atmosphere in excess of the maximum hourly allowable emissions of particulate matter calculated using the following equations:

For process weight rates up to 30 tons per hour: $E = 4.10 * P^{0.67}$
 For process weight rates in excess of 30 tons per hour: $E = 55.0 * P^{0.11} - 40$

Where E = rate of emissions in pounds per hour and p = process weight rate in tons per hour.

- A.9. Pursuant to ARM 17.8.322(4), TRP shall not burn liquid or solid fuels containing sulfur in excess of 1 pound per million BTU fired, unless otherwise specified by rule or in this permit.
- A.10. Pursuant to ARM 17.8.322(5), TRP shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions, unless otherwise specified by rule or in this permit.
- A.11. Pursuant to ARM 17.8.324(3), TRP shall not load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device or is a pressure tank as described in ARM 17.8.324(1), unless otherwise specified by rule or in this permit.

- A.12. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, TRP shall not place, store or hold in any stationary tank, reservoir or other container of more than 65,000 gallon capacity any crude oil, gasoline or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with a vapor loss control device, properly installed, in good working order and in operation.
- A.13. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, TRP shall not use any compartment of any single or multiple-compartment oil-effluent water separator, which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with a vapor loss control device, constructed so as to prevent emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.
- A.14. Pursuant to ARM 17.8.342 and 40 CFR Part 63.6, TRP shall submit to the Department a copy of any startup, shutdown, and malfunction (SSM) plan required under 40 CFR Part 63.6(e)(3) within 30 days of the effective date of this operating permit (if not previously submitted), within 30 days of the compliance date of any new National Emission Standard for Hazardous Air Pollutants (NESHAPs) or Maximum Achievable Control Technology (MACT) standard, and within 30 days of the revision of any such SSM plan, when applicable. The Department requests submittal of such plans in electronic form, when possible.
- A.15. On or before February 15 and August 15 of each year, TRP shall submit to the Department the compliance monitoring reports required by Section V.D. These reports must contain all information required by Section V.D, as well as the information required by each individual emissions unit. For the reports due by February 15 of each year, TRP may submit a single report, provided that it contains all the information required by Section V.B & V.D. Per ARM 17.8.1207,

any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including semiannual monitoring reports), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, “based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.”

- A.16. By February 15 of each year, TRP shall submit to the Department the compliance certification required by Section V.B. The annual certification required by Section V.B must include a statement of compliance based on the information available which identifies any observed, documented or otherwise known instance of noncompliance for each applicable requirement. Per ARM 17.8.1207,

any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including annual certifications), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, “based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.”

B. EU001 – Babcock and Wilcox Spreader Stoker Boiler (192.8 MMBtu/hr)

Section III.B.I: Babcock and Wilcox Spreader Stoker Boiler Startup and Shutdown Provisions					
Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
B.I.1, B.I.11, B.I.13, B.I.16, B.I.20, B.I.21	Startup and Shutdown Operations	<i>Best Management Operational Practices for Startup and Shutdown Events</i> on file with the Department, see Appendix H	Recordkeeping	Ongoing	Semiannual
B.I.2, B.I.13, B.I.16, B.I.20, B.I.21	Startup Operations Timeframe	48 Hours from Initial Fuel Feed	Recordkeeping	Ongoing	Semiannual
B.I.3, B.I.13, B.I.16, B.I.20, B.I.21	Shutdown Operations Timeframe	8 Hours from Initial Back-Down of Solid Fuel Feed	Recordkeeping	Ongoing	Semiannual
B.I.4, B.I.13, B.I.16, B.I.20, B.I.21	Minimum Boiler Heat Capacity	≤ 192.8 MMBtu/hr (based on 1-hr average)	Recordkeeping	Ongoing	Semiannual
B.I.5, B.I.6, B.I.13, B.I.16, B.I.20, B.I.21	Startup and Shutdown Fuel Specifications	Coal (<1% S by Weight and < 0.745 lb S/MMBtu), Wood, Fuel Oil (≤0.5% S by Weight), or Propane Only	Recordkeeping	Ongoing	Semiannual
B.I.7, B.I.13, B.I.16, B.I.20, B.I.21	Startup and Shutdown Boiler Baghouse Operation	Operational During All Startup and Shutdown Events	Recordkeeping	Ongoing	Semiannual
B.I.8, B.I.13, B.I.16, B.I.20, B.I.21	Applicable Equipment Operation	Good Air Pollution Control Practices to Minimize Emissions	Recordkeeping	Ongoing	Semiannual
B.I.9, B.I.14, B.I.17, B.I.21, B.I.22	Startup and Shutdown NO _x Emissions	74 lb/hr	NO _x CEMS	Ongoing	Semiannual
B.I.10, B.I.15, B.I.18, B.I.20, B.I.21	Startup and Shutdown SO ₂ Emissions	155 lb/hr	SO ₂ CEMS	Ongoing	Semiannual
B.I.12, B.I.13, B.I.16, B.I.19, B.I.20, B.I.21	Startup and Shutdown Documentation	Documentation of Each Startup and Shutdown Event	Recordkeeping	Each Startup and Shutdown Event	Semiannual

Conditions

- B.I.1. The requirements contained in Section III.B.I shall apply during boiler startup and shutdown operations. Babcock and Wilcox Spreader Stoker Boiler (boiler) startup and shutdown events shall be conducted as described in the *Best Management Operational Practices for Startup and Shutdown Events* on file with the Department and summarized in *Boiler Startup and Shutdown Procedures* included in Appendix H; or according to another startup and shutdown plan as may be approved by the Department, in writing (ARM 17.8.749 and ARM 17.8.752).
- B.I.2. Boiler startup operations, as generally described in Appendix H, shall not exceed 48 hours from initial fuel feed to the boiler pre-heater or boiler, whichever is applicable at initiation of the boiler startup event (ARM 17.8.752).

- B.I.3. Boiler shutdown operations, as described in Appendix H, shall not exceed 8 hours from initial backing down of solid fuel feed (coal and/or wood) to the boiler (ARM 17.8.752).
- B.I.4. Boiler heat input capacity shall be limited to 192.8 million British thermal units per hour (MMBtu/hr) during startup and shutdown operations based on a 1-hour average (ARM 17.8.749).
- B.I.5. During boiler startup and shutdown operations, the boiler may combust wood or fuel oil with a sulfur content less than or equal to 0.05% sulfur by weight, or propane (ARM 17.8.752).
- B.I.6. During boiler startup and shutdown operations, the boiler may combust coal with a sulfur content of less than or equal to 0.745 lb Sulfur/MMBtu or 1 percent (%) sulfur by weight (ARM 17.8.752).
- B.I.7. The boiler baghouse (DC5) shall be operational during startup and shutdown event(s). All pollution control equipment shall be operated as described in the *Best Management Operational Practices for Startup and Shutdown Events* on file with the Department and summarized in Appendix H (ARM 17.8.749).
- B.I.8. At all times, including periods of startup, shutdown, ash-pulling, soot blowing and malfunction, TRP shall, to the extent practicable, maintain and operate any affected equipment including applicable air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions (ARM 17.8.749 and ARM 17.8.752).
- B.I.9. During startup and shutdown operations, NO_x emissions from the boiler stack shall not exceed 74.0 lb/hr (ARM 17.8.752).
- B.I.10. During startup and shutdown operations, SO₂ emissions from the boiler stack shall not exceed 155.0 lb/hr (ARM 17.8.752).
- B.I.11. In the event that the *Best Management Operational Practices for Startup and Shutdown Events* on file with the Department, are modified significantly, such that boiler emissions, best management practices outlined in TRP's Montana Air Quality Permit (MAQP), or emissions limits change; TRP shall submit a permit modification for Department consideration (ARM 17.8.749).
- B.I.12. TRP shall document each boiler startup and shutdown event. The boiler startup and shutdown event documentation shall include, at a minimum, the reason/basis for the startup or shutdown event, the duration of the startup or shutdown event (in hours), and the procedures used to conduct and complete the startup or shutdown event. The information shall be submitted to the Department upon request (ARM 17.8.749).

Compliance Demonstration

- B.I.13. Monitoring compliance with boiler startup and shutdown provisions contained in *Best Management Operational Practices for Startup and Shutdown Events* on file with the Department and summarized in Appendix H (Section III.B.I.1 and Section III.B.I.11); the boiler startup operational time limit (Section III.B.I.2); the boiler shutdown operational time limit (Section III.B.I.3); the boiler heat input capacity (Section III.B.4) the boiler startup and shutdown fuel specifications (Section III.B.I.5 and Section III.B.I.6); the boiler baghouse DC5 operational requirements (Section III.B.I.7); the good air pollution control practices requirement (Section III.B.I.8); and the boiler startup and shutdown documentation requirement (Section III.B.I.12) shall be accomplished through recordkeeping (ARM 17.8.1213).

- B.I.14. TRP shall monitor compliance with the boiler startup and shutdown NO_x emission limit in Section III.B.I.9 through on-going operation of the NO_x Continuous Emission Monitoring System (CEMS) (ARM 17.8.1213).
- B.I.15. TRP shall monitor compliance with the boiler startup and shutdown SO₂ emission limit in Section III.B.I.10 through on-going operation of the SO₂ CEMS (ARM 17.8.1213).

Recordkeeping

- B.I.16. TRP shall maintain a startup and shutdown operation's log documenting any boiler startup and shutdown provisions contained in the *Best Management Operational Practices for Startup and Shutdown Events* on file with the Department and summarized in Appendix H (Section III.B.I.1 and Section III.B.I.11); the boiler startup operational time limit (Section III.B.I.2); the boiler shutdown operational time limit (Section III.B.I.3); the boiler heat input capacity (Section III.B.4) the boiler startup and shutdown fuel specifications (Section III.B.I.5 and Section III.B.I.6); the boiler baghouse DC5 operational requirement (Section III.B.I.7); the good air pollution control practices requirement (Section III.B.I.8); and the boiler startup and shutdown documentation requirement (Section III.B.I.12) which deviate from normal operations as specified in Section III.B.I.1 – Section III.B.I.8 and Section III.B.I.12. At a minimum, the log shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.1212).
- B.I.17. TRP shall document, by day, date and time, any NO_x emissions that exceed the limit as defined in III.B.I.9 based on a 1-hour average (ARM 17.8.1212).
- B.I.18. TRP shall document, by day, date and time, any SO₂ emissions that exceed the limit as defined in III.B.I.10 based on an 1-hour average (ARM 17.8.1212).
- B.I.19. TRP shall document, by day, date and time, all hours that the boiler is in startup and shutdown as defined in III.B.I.12. Each day, TRP shall sum the hours that the boiler is in startup and shutdown for each rolling 24-hour time period of the previous day.

Reporting

- B.I.20. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- B.I.21. The semiannual reporting shall provide (ARM 17.8.1212):
- a. A summary of the results of any source testing that was performed during that semiannual period; and
 - b. A summary of documentation required in Sections III.B.I.16 through III.B.I.19.
 - c. A summary of the results of any source testing that was performed during that semiannual period.

Section III.B.II: Babcock and Wilcox Spreader Stoker Boiler Operational Conditions					
Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
B.II.1, B.II.23, B.II.35, B.II.36, B.II.47, B.II.49	Boiler Heat Input Capacity	192.8 MMBtu/hr (based on 24-hr daily average) and 1,688,928 MMBtu/yr (rolling 12-month time period)	Recordkeeping	Ongoing/ Monthly	Semiannual/ Quarterly
B.II.2, B.II.23, B.II.37, B.II.47, B.II.49	Coal Fuel Feed Rate	105,558 ton/yr (12-month time period)	Recordkeeping	Monthly	Semiannual / Quarterly
B.II.3, B.II.23, B.II.38, B.II.47	Boiler Stack	100.5 Feet (ft) Tall by 6 ft in Diameter	Recordkeeping	Ongoing	Semiannual
B.II.4, B.II.23, B.II.26, B.II.34, B.II.38, B.II.45, B.II.46, B.II.47, B.II.48	NOx Control	OFA/FGR/SNCR	NOx CEMS / Method 7	Ongoing/ Initial and Every 2 Years	Semiannual
			CAM		
B.II.5, B.II.23, B.II.28, B.II.34, B.II.38, B.II.45, B.II.46, B.II.47, B.II.48	SO ₂ Control	Dry FGD	SO ₂ CEMS / Method 6	Ongoing/ Initial and Every 2 Years	Semiannual
			CAM		
B.II.6, B.II.23, B.II.34, B.II.38, B.II.42, B.II.45, B.II.46, B.II.47, B.II.48	PM/PM ₁₀ Control	Fabric Filter Baghouse (DC5)	Recordkeeping / Inspection and Maintenance Plan /	Ongoing/ Annual	Semiannual
			Method 5		
			CAM		
B.II.7, B.II.23, B.II.34, B.II.38, B.II.46, B.II.47, B.II.48	CO and VOC Control	Proper Boiler Design and Operation and Good Combustion Practices	CO / Method 10	Initial and Every 2 Years	Semiannual
			VOC/ Method 18/25	As Required by the Department and Section III.A.1	
B.II.8, B.II.23, B.II.38, B.II.45, B.II.47, B.II.48	HCl, H ₂ SO ₄ , and Hg Control	Dry FGD and Fabric Filter Baghouse	Recordkeeping	Ongoing	Semiannual
			CAM (HCl Only)		
B.II.9, B.II.23, B.II.38, B.II.47	Boiler Fuel Use	Coal and/or Wood Only, Except Startup and Shutdown	Recordkeeping	Ongoing	Semiannual
B.II.10, B.II.23, B.II.39, B.II.47	Coal Heating Value	≥ 8000 Btu/lb	Recordkeeping	Ongoing	Semiannual/ Quarterly
B.II.11, B.II.23, B.II.38, B.II.47, B.II.49	Coal Sulfur Content	≤ 1% S by Weight and 0.745 lb S/MMBtu	Recordkeeping	Ongoing	Semiannual/ Quarterly

B.II.12, B.II.25, B.II.41, B.II.47, B.II.48	Opacity	20% / 27%	COMS / Method 9	Initial and Annual	Semiannual
B.II.13, B.II.26, B.II.32, B.II.34, B.II.40, B.II.45, B.II.47	NOx Emissions	47.24 lb/hr (1-Hour Average); 0.196 lb/MMBtu (based on 30-Day rolling Average)	NOx CEMS / Method 7	Ongoing/ Initial and Every 2 Years	Semiannual
			CAM		
B.II.14, B.II.27, B.II.34, B.II.46, B.II.47, B.II.48	CO Emissions	0.259 lb/MMBtu (1-Hour Average) and 49.92 lb/hr (1-Hour Average)	Method 10	Initial and Every 2 Years	Semiannual
B.II.15, B.II.28, B.II.32, B.II.34, B.II.40, B.II.45, B.II.46, B.II.47, B.II.48	SO ₂ Emissions	0.220 lb/MMBtu (Rolling 30-Day Average) and 72.3 lb/hr (1-Hour Average)	SO ₂ CEMS / Method 6	Ongoing/ Initial and Every 2 Years	Semiannual
			CAM		
B.II.16, B.II.24, B.II.32, B.II.34, B.II.45, B.II.46, B.II.47, B.II.48	PM/PM ₁₀ Emissions	5.90 lb/hr (1-Hour Average) and 0.017 gr/dscf (1-Hour Average)	Method 5	Annual	Semiannual
			CAM		
B.II.17, B.II.29, B.II.34, B.II.47, B.II.48	VOC Emissions	0.0308 lb/MMBtu (1-Hour Average) and 5.93 lb/hr (1-Hour Average)	Method 18 / Method 25	As Required by the Department and Section III.A.1	Semiannual
B.II.18, B.II.30, B.II.32, B.II.34, B.II.45, B.II.46, B.II.47, B.II.48	HCl Emissions	0.01125 lb/MMBtu (1-Hour Average); 2.17 lb/hr (1-Hour Average); and 9.50 ton/yr (Annual Average)	Method 26	Initial and Every 4 Years	Semiannual
			CAM		
B.II.20, B.II.23, B.II.39, B.II.47	Coal Sampling	Representative Sample for Each Load of Coal from Each Supplier	Recordkeeping	Ongoing	Semiannual
B.II.21, B.II.23, B.II.38, B.II.47	Applicable Equipment Operation	Good Air Pollution Control Practices to Minimize Emissions	Recordkeeping	Ongoing	Semiannual
B.II.22, B.II.31, B.II.44, B.II.47, B.II.48	40 CFR 60, Subpart A and Subpart Db	Maintain Compliance as Applicable	40 CFR 60, Subpart A and Subpart Db	40 CFR 60, Subpart A and Subpart Db	Semiannual
B.II.19, B.II.33, B.II.38, B.II.43, B.II.47	Ash-pulling periods/events	<i>Best Management Operational Practices for Ash-pulling Periods</i> on file with the Department, see Appendix I	Recordkeeping	Ongoing	Semiannual

Conditions

- B.II.1. Boiler heat input capacity shall be limited to 192.8 MMBtu/hr based on a 24-hour daily average and 1,688,928 MMBtu during any rolling 12-month time period (ARM 17.8.749).
- B.II.2. The boiler coal-fuel feed rate shall not exceed 105,558 tons of coal during any rolling 12-month time period (ARM 17.8.749).
- B.II.3. The boiler main stack shall be a minimum of 100.5 feet tall and shall be 6 feet in diameter (ARM 17.8.749).
- B.II.4. NO_x emissions from the boiler shall be controlled by OFA, FGR, and SNCR. The OFA and FGR NO_x controls shall be installed prior to initial startup of the boiler combusting any fuel (ARM 17.8.752).
- B.II.5. SO₂ emissions from the boiler shall be controlled by a FGD system when combusting coal. The FGD shall be installed prior to initial startup of the boiler (ARM 17.8.752).
- B.II.6. PM/PM₁₀ emissions from the boiler shall be controlled by a boiler baghouse (DC5). TRP shall install, operate, and maintain all baghouses and bin-vents in accordance with the requirements contained in the facility Baghouse/Bin Vent Inspection and Maintenance Plan (I&M Plan located in Appendix E of this permit) (ARM 17.8.749 and ARM 17.8.752).
- B.II.7. CO and VOC emissions from the boiler shall be controlled by proper boiler design and operation and good combustion practices (ARM 17.8.752).
- B.II.8. HCl gas, H₂SO₄, and Hg emissions from the boiler shall be controlled by a FGD unit in combination with a fabric filter baghouse (ARM 17.8.752).
- B.II.9. The boiler may be fired with coal and/or wood only except for periods of boiler startup and shutdown, as specified in Section III.B.I (ARM 17.8.749).
- B.II.10. Coal fired in the boiler shall have a minimum heating value of 8,000 Btu/lb (ARM 17.8.749).
- B.II.11. The sulfur content of any coal fired in the boiler shall not exceed 0.745 lb Sulfur/MMBtu or 1% sulfur by weight (ARM 17.8.752).
- B.II.12. TRP shall not cause or authorize to be discharged into the atmosphere from the fabric filter baghouse controlling emissions from the boiler (boiler baghouse – DC5) any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes except for one 6-minute period per hour of not greater than 27% opacity (ARM 17.8.340 and 40 CFR 60.43b(f), Subpart Db).
- B.II.13. Except during periods of boiler startup and shutdown, as specified in Section III.B.I, NO_x emissions from the boiler shall not exceed the following:
 - a. 47.24 lb/hr, based on a 1-hr average (ARM 17.8.749),
 - b. 0.196 lb/MMBtu based on a rolling 30-day average (ARM 17.8.749).
- B.II.14. CO emissions from the boiler shall not exceed the following (ARM 17.8.752):
 - a. 0.259 lb/MMBtu, based on a 1-hr average; and
 - b. 49.92 lb/hr, based on a 1-hr average.

B.II.15. Except during periods of boiler startup and shutdown, as specified in Section III.B.I, SO₂ emissions from the boiler shall not exceed the following:

- a. 0.220 lb/MMBtu, based on a rolling 30-day average (ARM 17.8.752); and
- b. 72.3 lb/hr, based on a 1-hr average (ARM 17.8.749).

B.II.16. PM/PM₁₀ emissions from the boiler shall not exceed the following (ARM 17.8.752):

- a. 5.90 lb/hr, based on a 1-hr average; and
- b. 0.017 grains per dry standard cubic feet (gr/dscf*), based on a 1-hr average.
* The grain loading limit in Section II.B.16.b is the boiler Baghouse (DC5) limit.

B.II.17. VOC emissions from the boiler shall not exceed the following (ARM 17.8.752):

- a. 0.0308 lb/MMBtu, based on a 1-hr average; and
- b. 5.93 lb/hr, based on a 1-hr average.

B.II.18. HCl emissions from the boiler shall not exceed the following:

- a. 0.01125 lb/MMBtu, based on a 1-hr average (ARM 17.8.752);
- b. 2.17 lb/hr, based on a 1-hr average (ARM 17.8.752); and
- c. 9.50 ton/yr (ARM 17.8.749).

B.II.19. Ash-pulling periods/events shall be conducted as described in *Best Management Operating Procedures for Ash-Pulling Periods* on file with the Department and included in Appendix I (ARM 17.8.749 and ARM 17.8.752).

- a. TRP shall maintain and operate all equipment including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions (ARM 17.8.749 and ARM 17.8.752).
- b. During this time, best management practices and good combustion control shall apply as described in *Best Management Operating Procedures for Ash-Pulling Periods* and summarized in Appendix I (ARM 17.8.752).

B.II.20. TRP shall obtain a written coal analysis that is representative of each load of coal received from each coal supplier. The coal analysis shall contain, at a minimum, sulfur content (sulfur percent (by weight) and in pounds of Sulfur/MMBtu), ash content, heating value (Btu/lb), and chlorine concentration (ARM 17.8.749 and ARM 17.8.752).

B.II.21. At all times, including periods of startup, shutdown, soot blowing, and malfunction, TRP shall, to the extent practicable, maintain and operate any affected equipment including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions (ARM 17.8.749).

B.II.22. TRP shall comply with all applicable standards and limitations, and the reporting, recordkeeping and notification requirements contained in 40 CFR 60, Subpart A, and 40 CFR 60, Subpart Db (ARM 17.8.340, 40 CFR 60, Subpart A and Subpart Db).

Compliance Demonstration

- B.II.23. Monitoring compliance with the 24-hour and annual boiler heat input limits (Section III.B.II.1); the annual boiler coal fuel feed limit (Section III.B.II.2); the boiler stack specifications (Section III.B.II.3); the requirement to follow Baghouse I&M Plan for baghouse and bin vents (Section III.B.II.6); the boiler emission control requirements (Section III.B.II.4, Section III.B.II.5, Section III.B.II.7, and Section III.B.II.8); the boiler fuel-type requirements (Section III.B.II.9); the coal fuel minimum heating value (Section III.B.II.10); the coal fuel sulfur content requirement (Section III.B.II.11); the coal fuel analysis requirement (Section III.B.II.20); and the good air pollution control practices requirement (Section III.B.II.21) shall be accomplished through recordkeeping (ARM 17.8.1213).
- B.II.24. Compliance with the PM/PM₁₀ emission limits for the boiler/boiler Baghouse – DC5 shall be monitored by an initial performance source test conducted within 60 days of achieving the maximum production rate at which the affected facility will be operated or according to another testing/monitoring schedule as may be approved by the Department in writing. After the initial source test, testing shall continue annually or according to another testing/monitoring schedule as may be approved by the Department in writing (ARM 17.8.105, ARM 17.8.749, 40 CFR Part 60.8, and 40 CFR 60, Subpart Db).
- B.II.25. After the initial source test monitoring for opacity, compliance with the boiler/boiler Baghouse – DC5 opacity limit, TRP shall use the data from the Continuous Opacity Monitoring System (COMS) to monitor continued compliance with the applicable opacity limit. TRP shall install, operate, and maintain COMS to monitor compliance with the boiler opacity limits. Opacity emissions monitoring shall be subject to 40 CFR 60, Subpart Db, Appendix B (Performance Specifications) and Appendix F (Quality Assurance/Quality Control) provisions. TRP shall inspect and audit the COMS annually, using neutral density filters (EPA Technical Assistance Document: Performance Audit Procedures for Opacity Monitors; EPA-450/4-92-010, April 1992). The annual monitor audit may coincide with the required compliance source testing (ARM 17.8.340, ARM 17.8.749, ARM 17.8.1213, and 40 CFR 60, Subpart Db).
- B.II.26. Compliance with the NO_x emission limits for the boiler shall be monitored by an initial Method 7 performance source test conducted within 60 days of achieving the maximum production rate at which the affected facility will be operated or according to another testing/monitoring schedule as may be approved by the Department in writing. TRP shall conduct performance source testing for NO_x and CO, concurrently. After the initial source test, testing shall continue on an every 2-year basis or according to another testing/monitoring schedule as may be approved by the Department in writing. TRP may use testing in conjunction with the Relative Accuracy Test Audit (RATA) completed for certification of the NO_x Continuous Emission Monitoring System (CEMS), as a compliance test, if maximum achievable process rates are maintained (ARM 17.8.105, ARM 17.8.749, 40 CFR Part 60.8, and 40 CFR 60, Subpart Db).

In addition, TRP shall install, monitor, operate and maintain NO_x CEMS and use this data to monitor ongoing compliance with the applicable boiler NO_x emission limits. NO_x emissions monitoring shall be subject to 40 CFR 60, Subpart Db, Appendix B (Performance Specifications) and Appendix F (Quality Assurance/Quality Control) provisions. TRP shall conduct a RATA for the NO_x CEMS annually. The annual monitor RATA may coincide with the required compliance source testing (ARM 17.8.340, ARM 17.8.749, ARM 17.8.1213, and 40 CFR 60, Subpart Db).

- B.II.27. Compliance with the CO emission limits for the boiler shall be monitored by an initial Method 10 performance source test conducted within 60 days of achieving the maximum production rate at which the affected facility will be operated or according to another testing/monitoring schedule as may be approved by the Department in writing. TRP shall conduct the performance source

testing for CO and NO_x, concurrently. After the initial source test, testing shall continue on an every 2-year basis or according to another testing/monitoring schedule as may be approved by the Department in writing (ARM 17.8.105, 40 CFR Part 60, Subpart A, and 40 CFR 60, Subpart Db).

- B.II.28. Compliance with the SO₂ emission limits for the boiler shall be monitored by an initial Method 6 performance source test conducted within 60 days of achieving the maximum production rate, or according to another testing/monitoring schedule as may be approved by the Department in writing. After the initial source test, testing shall continue on an every 2-year basis or according to another testing/monitoring schedule as may be approved by the Department in writing. TRP may use testing in conjunction with the RATA completed for certification of the SO₂ CEMS, as a compliance test, if maximum achievable process rates are maintained (ARM 17.8.105 and ARM 17.8.749).

In addition, TRP shall install, monitor, operate and maintain SO₂ CEMS and use this data to monitor ongoing compliance with the applicable boiler SO₂ emission limits. TRP is not subject to the SO₂ monitoring requirements contained in 40 CFR 60, Subpart Db, Appendix B (Performance Specifications) and Appendix F (Quality Assurance/Quality Control); however, for the purpose of maintaining established and accepted monitoring protocol, TRP shall comply with the SO₂ CEMS monitoring requirements of these provisions. TRP shall conduct an annual RATA for the SO₂ CEMS. The annual monitor RATA may coincide with the required compliance source testing (ARM 17.8.749 and ARM 17.8.1213).

- B.II.29. As required by the Department and Section III.A.1, TRP shall conduct VOC performance source testing on the boiler. The source test method used shall be Method 18 and/or Method 25, or another source test method as may be approved by the Department in writing. The source test shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.105 and ARM 17.8.749).

- B.II.30. Compliance with the HCl emission limits for the boiler shall be monitored by an initial performance source test conducted within 60 days of achieving the maximum production rate at which the affected facility will be operated or according to another testing/monitoring schedule as may be approved by the Department in writing. The source test method used shall be Method 26 or another source test method as may be approved by the Department in writing. After the initial source test, testing shall continue on an every 4-year basis or according to another testing/monitoring schedule as may be approved by the Department in writing (ARM 17.8.105).

- B.II.31. TRP shall monitor compliance with the applicable requirements of 40 CFR 60, Subpart A and Subpart Db pursuant to 40 CFR 60, Subpart A and Subpart Db (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart Db).

- B.II.32. TRP shall monitor emission control performance and provide a reasonable assurance of compliance with emission limitations or standards for the anticipated range of boiler operations for NO_x, SO₂, PM/PM₁₀, and HCl in accordance with Appendix G, Compliance Assurance Monitoring (CAM) (ARM 17.8.1213).

- B.II.33. Compliance with Section III.B.II.19 shall be demonstrated by continuous operation of the NO_x and SO₂ CEMS and by conducting all ash-pulling procedures/events in accordance with the *Best Management Operating Procedures for Ash-Pulling Periods* on file with the Department and summarized in Appendix I (ARM 17.8.749 and ARM 17.8.752).

Recordkeeping

- B.II.34. All source test recordkeeping shall be performed in accordance with the test method used, and shall be maintained on site. The reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1212).
- B.II.35. TRP shall document, by day, the boiler heat input value in MMBtu/hr on a 24-hour calendar-day average. The daily information will be used to verify compliance with the 24-hour daily limitation in Section III.B.II.1. TRP shall maintain a heat input monitoring system capable of demonstrating compliance with the 24-hour calendar-day heat input limit. TRP shall use the coal heating value established under the coal analysis requirement for the coal fired at that time and shall use a wood heating value of 5,200 Btu/lb from AP-42, Fifth Edition, Volume I, Appendix A (ARM 17.8.749).
- B.II.36. TRP shall document, by month, the boiler heat input value in MMBtu/month. By the 25th day of each month, TRP shall total the heat input in MMBtu for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section III.B.II.1. The information for each of the previous months shall be submitted along with the annual emission inventory. TRP shall use the coal heating value established under the coal analysis requirement for the coal fired at that time and shall use a wood heating value of 5,200 Btu/lb from AP-42, Fifth Edition, Volume I, Appendix A (ARM 17.8.749).
- B.II.37. TRP shall document, by month, the coal feed rate to the boiler in tons/month. By the 25th day of each month, TRP shall total the total tons of coal feed to the boiler for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section III.B.II.2. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- B.II.38. TRP shall maintain on-site a boiler operations log documenting any change to boiler stack specifications (Section III.B.II.3); boiler H₂SO₄ and Hg emission control equipment (Section III.B.II.8); boiler fuel-type use (Section III.B.II.9 and Section III.B.II.11); and good air pollution control practices (Section III.B.II.21) which deviate from normal operations as specified in Sections III.B.II.3 - III.B.II.8 and III.B.II.19. At a minimum, the boiler operations log shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.1212).
- B.II.39. TRP shall maintain a fuel log containing information on all coal shipments received and all coal fired in the boiler. The documented information shall be used to monitor compliance with the coal fuel minimum heating values (Section III.B.II.10); coal fuel sulfur content (Section III.B.II.11); and coal analysis requirement (Section III.B.II.20). At a minimum, all records shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.505 and ARM 17.8.749).
- B.II.40. TRP shall maintain a record of all measurements from the COMS, the NO_x CEMS, and the SO₂ CEMS. The COMS/CEMS records shall be retained on site for at least 5 years following the date of such measurements. TRP shall supply these records to the Department upon request (ARM 17.8.749).
- B.II.41. All COMS and CEMS performance evaluations; all COMS and CEMS annual certifications; all COMS and CEMS monitoring device calibration checks and audits; and all adjustments and maintenance performed on these systems or devices shall be recorded in a permanent form suitable for inspection. The file shall be retained on site for at least 5 years following the date of such measurements and reports. TRP shall supply these records to the Department upon request (ARM 17.8.749).

- B.II.42. TRP shall maintain on-site records of all maintenance and inspection activities performed in accordance with the I&M Plan contained in Appendix E (ARM 17.8.749).
- B.II.43. TRP shall maintain records in accordance with Appendix I and the *Best Management Operating Procedures for Ash-Pulling Periods* on file with the Department. At a minimum, the records shall include the required information in accordance with Appendix I and Section III.B.II.19. All records shall include the date and the initials of the documenting personnel.
- B.II.44. TRP shall perform recordkeeping in accordance with the applicable requirements of 40 CFR 60, Subpart A and Subpart Db (ARM 17.8.340 and 40 CFR 60, Subpart A, and Subpart Db).
- B.II.45. TRP shall prepare and store data, as applicable, in accordance with 40 CFR Part 64 and the CAM Plan, Appendix G of this permit (ARM 17.8.1212 and 40 CFR Part 64).

Reporting

- B.II.46. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- B.II.47. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- B.II.48. The semiannual reporting shall provide (ARM 17.8.1212):
- a. A summary of the results of any source testing that was performed during the reporting period;
 - b. Certification that records were established and maintained as required in Section III.B.II.47;
 - c. A summary of the COMS, NO_x CEMS, and SO₂ CEMS measurements as required in Section III.B.II.40;
 - d. A summary of all required COMS, NO_x CEMS, and SO₂ CEMS recordkeeping as required in Section III.B.II.41;
 - e. A summary of any corrective actions taken as a result of the inspections and maintenance required by I&M Plan in Appendix E of this permit as required in Section III.B.II.42;
 - f. A summary of compliance with the applicable requirements of 40 CFR 60, Subpart A and Subpart Db, as required in Section III.B.II.45; and
 - g. Certification of compliance with 40 CFR Part 64 and Appendix G, CAM Plan.
- B.II.49. The quarterly reporting shall provide (ARM 17.8.1212):
- a. A summary of the rolling annual and 24-hour daily boiler heat input values required in Section III.B.II.35 and Section III.B.II.36;
 - b. A summary of the rolling annual coal fuel feed rate required in Section III.B.II.37; and
 - c. A summary of the coal supply and coal fuel analyses required in Section III.B.II.39.

C. EU002 – Fuel Storage and Handling Operations (Coal & Wood)

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
C.1, C.10, C.11, C.15, C.16, C.20, C.21, C.22	Opacity	20%	Method 9	Every 2 Years	Semiannual
			Visual Surveys	Weekly	
C.2, C.10, C.11, C.15, C.16, C.20, C.21, C.22	Particulate Matter- DC1	0.02 gr/dscf	Method 5	Every 2 Years	Semiannual
	Particulate Matter- DC2	0.02 gr/dscf	Method 5	As Required by the Department and Section III.A.1	Semiannual
C.3, C.12, C.15, C.16, C.20, C.21, C.22	Opacity / Reasonable Precautions	20%	Visual Surveys	Weekly	Semiannual
C.4, C.13, C.14, C.17, C.18, C.21, C.22	Under Track Hopper: Enclosures and Baghouse	Install, Operate, and Maintain	Recordkeeping / Inspection and Maintenance Plan	Ongoing	Semiannual
C.5, C.13, C.14, C.17, C.18, C.21, C.22	Fuel Handling Conveyors and Silo: Enclosures and Bin Vent	Install, Operate, and Maintain	Recordkeeping / Inspection and Maintenance Plan	Ongoing	Semiannual
C.6, C.13, C.14, C.17, C.18, C.21, C.22	Conveyors (C1 and C2): ≤ 200 ton/hr and Bin Vent	Install, Operate, and Maintain	Recordkeeping / Inspection and Maintenance Plan	Ongoing	Semiannual
C.7, C.14, C.18, C.21, C.22	Outdoor Storage: Wind Fence, Berm, Reasonable Precautions	Install, Operate, and Maintain	Recordkeeping	Ongoing	Semiannual
C.8, C.14, C.18, C.19, C.21, C.22	Combined Outdoor Coal Storage and/or Wood	≤9000 tons	Recordkeeping	Ongoing	Semiannual
C.9, C.14, C.18, C.21, C.22	Wood Fuel: Enclosed Pneumatic Conveyor	Install, Operate, and Maintain	Recordkeeping	Ongoing	Semiannual

Conditions

- C.1. TRP shall not cause or authorize to be discharged into the atmosphere from any stack or vent any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- C.2. PM/PM₁₀ emissions from the Fuel Handling Baghouse – DC1, and Fuel Handling Bin Vent – DC2 shall not exceed 0.02 gr/dscf per baghouse (ARM 17.8.752).

- C.3. TRP shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit (ARM 17.8.308(1)).
- C.4. All railcar coal deliveries/transfers shall be unloaded via a bottom dump into an under-track hopper. PM/PM₁₀ emissions from railcar transfers to the under-track hopper shall be enclosed and controlled by a fabric filter baghouse (Fuel Handling Baghouse – DC1). TRP shall install, operate, and maintain all baghouses and bin-vents in accordance with the requirements contained in the facility Baghouse/Bin Vent Inspection and Maintenance Plan (I&M Plan) (Appendix E of this permit) (ARM 17.8.749 and ARM 17.8.752).
- C.5. Coal or wood shall be delivered via conveyor (C1 and C2) to the day-bin silo (S1) prior to Boiler feed. PM/PM₁₀ emissions from C1 loading shall be controlled by a partially enclosed (3-sided) hopper and vented to DC1. S1 shall be enclosed and vented to a fabric filter bin vent (Fuel Handling Bin Vent – DC2). TRP shall install, operate, and maintain all baghouses and bin-vents in accordance with the requirements contained in the facility I&M Plan (Appendix E of this permit) (ARM 17.8.749 and ARM 17.8.752).
- C.6. All material transfer conveyors for fuel storage and handling operations shall be limited to a maximum of 200 tons per hour capacity and shall be enclosed and vented to a Fuel Handling Baghouse – DC1 and/or Fuel Handling Bin Vent – DC2. TRP shall install, operate, and maintain all baghouses and bin-vents in accordance with the requirements contained in the facility Baghouse/Bin Vent Inspection and Maintenance Plan (I&M Plan) (Appendix E of this permit) (ARM 17.8.749 and ARM 17.8.752).
- C.7. TRP shall install and maintain wind fencing and an earthen berm to control fugitive dust emissions resulting from outdoor coal storage piles and operations. Further, TRP shall use reasonable precautions to control fugitive dust emissions from coal pile storage operations. Reasonable precautions shall include, but not be limited to, minimizing the number of coal pile disturbances, minimizing the area of coal pile disturbances, minimizing the fall distance of coal pile storage operations, and the use of wet dust suppression, as necessary, to control fugitive dust emissions from coal pile storage operations (ARM 17.8.752).
- C.8. The combined outdoor coal storage and on-site wood storage shall be limited to a maximum of 9,000 tons at any given time (ARM 17.8.749).
- C.9. Wood fuel shall be delivered to the Boiler via a pneumatic conveyor system. The pneumatic conveyor shall be enclosed and vented through the Boiler and DC5 (ARM 17.8.752).

Compliance Demonstration

- C.10. Monitoring compliance with the Opacity and PM/PM₁₀ limits for the Fuel Handling Baghouse – DC1 shall be determined by an initial Method 9 and Method 5 performance source test, respectively, conducted within 60 days of achieving the maximum production rate at which the affected facility will be operated but not later than 180 days after initial startup. After the initial source test, testing shall continue on an every 2-year basis or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105, ARM 17.8.749, and ARM 17.8.752).

In addition, TRP shall conduct a weekly visual survey of the visible emissions from Fuel Handling Baghouse – DC1. Once per calendar week during daylight hours, TRP shall visually survey emissions from DC1 for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, TRP shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then TRP shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve TRP of a liability for a violation determined using Method 9 (ARM 17.8.1213).

- C.11. Monitoring compliance with the opacity limit for the Fuel Handling Bin Vent – DC2 shall be determined by an initial Method 9 performance source test conducted within 60 days of achieving the maximum production rate at which the affected facility will be operated but not later than 180 days after initial startup. After the initial source test, testing shall continue on an every 2-year basis or according to another testing/ monitoring schedule as may be approved by the Department. Compliance with the PM/PM₁₀ emission limits for the Fuel Handling Bin Vent – DC2 shall be monitored by a Method 5 performance source test conducted as required by the Department and Section III.A.1 (ARM 17.8.105, ARM 17.8.749, ARM 17.8.752).

In addition, TRP shall conduct a weekly visual survey of the visible emissions from Fuel Handling Bin Vent – DC2. Once per calendar week during daylight hours, TRP shall visually survey emissions from DC2 for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, TRP shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then TRP shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve TRP of a liability for a violation determined using Method 9 (ARM 17.8.1213).

- C.12. Monitoring compliance with the Opacity limit for fuel handling sources of fugitive emissions including fugitive emissions from the under track hopper coal unloading operations, coal conveyors and coal transfer points, outside coal storage operations, outside wood storage operations, and any other associated source of excessive fugitive particulate emissions, shall be determined by a Method 9 source test, as required by the Department (ARM 17.8.1213).

In addition, TRP shall conduct a weekly visual survey of the visible fugitive emissions during coal fuel storage and handling operations. Once per calendar week during daylight hours, TRP shall visually survey fugitive emissions from the under track hopper coal unloading operations, all coal conveyors and coal transfer points, outside coal storage operations, outside wood storage operations, and any other associated source of excessive fugitive emissions. For the purpose of this survey, excessive fugitive emissions are considered to be any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, TRP shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then TRP shall

immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve TRP of a liability for a violation determined using Method 9 (ARM 17.8.1213).

- C.13. TRP shall install, operate, and maintain the Fuel Handling Baghouse – DC1 and Fuel Handling Bin Vent – DC2 in accordance with the requirements contained in the I&M Plan in Appendix E of this permit (ARM 17.8.749).
- C.14. Compliance monitoring for the under track hopper requirement (Section III.C.4); the conveyor/silo requirements (Section III.C.5); the conveyor capacity limit (Section III.C.6); the outdoor coal storage control requirements (Section III.C.7); the outdoor coal storage limit (Section III.C.8); the wood conveyor requirements (Section III.C.9); and the outdoor wood storage limit (Section III.C.10) shall be accomplished through recordkeeping (ARM 17.8.1213).

Recordkeeping

- C.15. All source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site. The reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- C.16. TRP shall maintain on-site a log containing all visual observations monitoring compliance with the visual survey requirement(s). The log shall include, at a minimum, the required information, the date, the time, and the initials of the documenting personnel (ARM 17.8.1212).
- C.17. TRP shall maintain on-site records of all maintenance and inspection activities performed in accordance with the I&M Plan in Appendix E to this permit (ARM 17.8.1212).
- C.18. TRP shall maintain on site a fuel storage and handling operations log documenting any under track hopper operations (Section III.C.4); conveyor/silo operations (Section III.C.5); conveyor capacity (Section III.C.6); outdoor coal and/or wood storage operations (Section III.C.7); and wood conveyor operations (Section III.C.9) which deviate from normal operations as specified in Sections III.C.4, III.C.5, III.C.6, III.C.7, and Section III.C.9. At a minimum, the fuel storage and handling operations log shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.1212).
- C.19. TRP shall maintain a daily fuel storage operations log tracking the total amount of outdoor coal and wood stored on site at any given time. The log shall include, at a minimum, the total amount of coal and wood stored on site at any given time, the date of the measurement, and the initials of the documenting personnel (ARM 17.8.1213).

Reporting

- C.20. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- C.21. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- C.22. The semiannual reporting shall provide (ARM 17.8.1212):

- a. A summary of the results of any source testing that was performed during the reporting period;
- b. A summary of all visual observations monitoring compliance with the visual survey requirement(s);
- c. A summary of all maintenance and inspection activities performed in accordance with the I&M Plan in Appendix E of this permit;
- d. Certification that records were established and maintained as required in Sections III.C.18 and III.C.19; and
- e. A summary of the log monitoring compliance with the outdoor coal and wood storage limit.

D. EU003 – Lime Storage and Handling Operations

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
D.1, D.5, D.6, D.9, D.10, D.14, D.15	Enclosed Silo / Bin Vent	Install, Operate, and Maintain	Recordkeeping / Inspection and Maintenance Plan	On-going	Semiannual
D.2, D.7, D.11, D.12, D.13, D.14, D.15	Opacity	20%	Method 9	Every 2 Years	Semiannual
			Visual Surveys	Weekly	
D.3, D.7, D.11, D.13, D.14, D.15	Particulate Matter	0.02 gr/dscf	Method 5	As Required by the Department and Section III.A.1	Semiannual
D.4, D.8, D.11, D.12, D.13, D.14, D.15	Opacity / Reasonable Precautions	20%	Method 9	As Required by the Department and Section III.A.1	Semiannual
			Visual Surveys	Weekly	

Conditions

- D.1. All lime shall be stored in an enclosed silo. TRP shall install and operate a fabric filter bin vent (Lime Silo Bin Vent – DC3) to control PM/PM₁₀ emissions from the lime silo supplying the flue-gas desulfurization unit (ARM 17.8.752).
- D.2. TRP shall not cause or authorize to be discharged into the atmosphere from any stack or vent any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- D.3. TRP shall not cause or authorize to be discharged into the atmosphere from the Lime Silo Bin Vent – DC3 any PM/PM₁₀ emissions in excess of 0.02 gr/dscf (ARM 17.8.752).
- D.4. TRP shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit (ARM 17.8.308(1)).

Compliance Demonstration

- D.5. TRP shall install, operate, and maintain the Lime Silo Bin Vent – DC3 in accordance with the requirements contained in the I&M Plan in Appendix E of this permit (ARM 17.8.749).
- D.6. Compliance monitoring for the enclosed silo storage and bin-vent emission control (Section III.D.1) shall be accomplished through recordkeeping (ARM 17.8.1213).
- D.7. Compliance with the opacity limit for the Lime Silo Bin Vent – DC3 shall be monitored by an initial Method 9 performance source test conducted within 60 days of achieving the maximum production rate at which the affected facility will be operated but not later than 180 days after initial startup. After the initial source test, testing shall continue on an every 2-year basis or according to another testing/ monitoring schedule as may be approved by the Department in writing. Compliance with the PM/PM₁₀ emission limits for the Lime Silo Bin Vent – DC3 shall be monitored by a performance source test conducted as required by the Department and Section III.A.1 (ARM 17.8.105, ARM 17.8.749, ARM 17.8.752).

In addition, TRP shall conduct a weekly visual survey of the visible emissions from the Lime Silo Bin Vent – DC3. Once per calendar week during daylight hours, TRP shall visually survey emissions from DC3 for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, TRP shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then TRP shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve TRP of a liability for a violation determined using Method 9 (ARM 17.8.1213).

- D.8. Monitoring compliance with the opacity limit for lime storage and handling sources of fugitive emissions shall be determined by a Method 9 source test conducted as required by the Department and Section III.A.1 (ARM 17.8.1213).

In addition, TRP shall conduct a weekly visual survey of the visible fugitive emissions during lime storage and handling operations. Once per calendar week during daylight hours, TRP shall visually survey fugitive emissions from lime storage and handling operations for sources of excessive fugitive emissions. For the purpose of this survey, excessive fugitive emissions are considered to be any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, TRP shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then TRP shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve TRP of a liability for a violation determined using Method 9 (ARM 17.8.1213).

Recordkeeping

- D.9. TRP shall maintain on-site records of all maintenance and inspection activities performed in accordance with the I&M Plan in Appendix E to this permit (ARM 17.8.1212).

- D.10. TRP shall maintain on site a lime storage and handling operations log documenting any enclosed silo with bin-vent emission control (Section III.D.1), which deviate from normal operations as specified in Sections III.D.1. At a minimum, the lime storage and handling operations log shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.1212).
- D.11. All source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site. The reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1212).
- D.12. TRP shall maintain on site a log containing all visual observations monitoring compliance with the visual survey requirement. The log shall include the required information, the date, the time, and the initials of the documenting personnel (ARM 17.8.1212).

Reporting

- D.13. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- D.14. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- D.15. The semiannual reporting shall provide (ARM 17.8.1212):
 - a. A summary of all maintenance and inspection activities performed in accordance with the I&M plan in Appendix E of this permit;
 - b. Certification that records were established and maintained as required in Section III.D.9;
 - c. A summary of the results of any source testing that was performed during the reporting period;
and
 - d. A summary of all visual observations monitoring compliance with the visual survey requirement(s).

E. EU004 – Fly/Bottom Ash Storage and Handling Operations

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration Method Frequency		Reporting Requirements
E.1, E.7, E.11, E.12, E.15, E.16, E.17	Opacity	20%	Method 9	Every 2 Years	Semiannual
			Visual Surveys	Weekly	
E.2, E.7, E.11, E.15, E.16, E.17	Particulate Matter	0.02 gr/dscf	Method 5	As Required by the Department and Section III.A.1	Semiannual
E.3, E.8, E.11, E.12, E.15, E.16, E.17	Opacity/Reasonable Precautions	20%	Visual Surveys	Weekly	Semiannual
E.4, E.9, E.10, E.13, E.14, E.16, E.17	Bin Vent(s)	Install, Operate, and Maintain	Recordkeeping /Inspection and Maintenance Plan	Ongoing	Semiannual
E.5, E.10, E.14, E.16, E.17	Fly Ash Gravity Feed Retractable Load-Out Spout	Install, Operate, and Maintain	Recordkeeping	Ongoing	Semiannual
E.6, E.10, E.14, E.16, E.17	Bottom Ash Partial Enclosure	Install, Operate, and Maintain	Recordkeeping	Ongoing	Semiannual

Conditions

- E.1. TRP shall not cause or authorize to be discharged into the atmosphere from any stack or vent any visible emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- E.2. TRP shall not cause or authorize to be discharged into the atmosphere from the Fly/Bottom Ash Silo Bin Vent – DC4 and DC6, respectively, any PM/PM₁₀ emissions in excess of 0.02 gr/dscf (ARM 17.8.752).
- E.3. TRP shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes, unless otherwise specified by rule or in this permit (ARM 17.8.308(1)).
- E.4. All ash (fly and bottom ash) produced during boiler operations shall be stored in enclosed silos. TRP shall install and operate fabric filter dust collectors (Fly Ash Silo Bin Vent – DC4 & Bottom Ash Silo Bin Vent – DC6) to control PM/PM₁₀ emissions from the ash silos collecting boiler bottom ash/fly ash (ARM 17.8.752).
- E.5. All fly ash transfers to trucks shall be gravity fed through a retractable load-out spout (ARM 17.8.749).
- E.6. All bottom ash transfers to trucks shall utilize a partial (3-sided) enclosure to control fugitive dust emissions (ARM 17.8.749).

Compliance Demonstration

- E.7. Compliance with the opacity limit for the Fly Ash Silo Bin Vent – DC4 and DC6 shall be monitored by an initial Method 9 performance source test conducted within 60 days of achieving the maximum production rate at which the affected facility will be operated but not later than 180 days after initial startup. After the initial source test, testing shall continue on an every 2-year basis or according to another testing/ monitoring schedule as may be approved by the Department. Compliance with the PM/PM₁₀ emission limits for the Fly Ash Silo Bin Vent – DC4 and DC6 shall be monitored by a performance source test conducted as required by the Department and Section III.A.1 (ARM 17.8.105, ARM 17.8.749, ARM 17.8.752).

In addition, TRP shall conduct a weekly visual survey of the visible emissions from the Fly Ash Silo Bin Vent – DC4 and the Bottom Ash Silo Bin Vent – DC6. Once per calendar week during daylight hours, TRP shall visually survey emissions from DC4 and DC6, respectively, for any sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, TRP shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then TRP shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve TRP of a liability for a violation determined using Method 9 (ARM 17.8.1213).

- E.8. Monitoring compliance with the opacity limit for ash storage and handling sources of fugitive emissions shall be determined by a Method 9 source test, as required by the Department and Section III.A.1 (ARM 17.8.1213).

In addition, TRP shall conduct a weekly visual survey of the visible fugitive emissions during ash storage and handling operations. Once per calendar week during daylight hours, TRP shall visually survey fugitive emissions from ash storage and handling operations for sources of excessive fugitive emissions. For the purpose of this survey, excessive fugitive emissions are considered to be any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, TRP shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then TRP shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve TRP of a liability for a violation determined using Method 9 (ARM 17.8.1213).

- E.9. TRP shall install, operate, and maintain the Fly Ash Silo Bin Vent – DC4 and Bottom Ash Silo Bin Vent – DC6 in accordance with the requirements contained in the I&M Plan in Appendix E of this permit (ARM 17.8.749).

- E.10. Compliance monitoring for the enclosed silo storage and bin-vent emission control (Section III.E.1), retractable load-out spout (Section III.E.5) and the partial (3-sided) enclosure (Section III.E.6) shall be accomplished through recordkeeping (ARM 17.8.1213).

Recordkeeping

- E.11. All source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site. The reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.1212).
- E.12. TRP shall maintain on-site a log containing all visual observations monitoring compliance with the visual survey requirement(s) in Section III.E.1 and III.E.3. The log shall include, at a minimum, the required information, the date, the time, and the initials of the documenting personnel (ARM 17.8.1212).
- E.13. TRP shall maintain on-site records of all maintenance and inspection activities performed in accordance with the I&M Plan in Appendix E to this permit (ARM 17.8.1212).
- E.14. TRP shall maintain on site an ash storage and handling operations log documenting any enclosed silo storage and bin-vent emission control (Section III.E.1); retractable load-out spout (Section III.E.5); and partial (3-sided) enclosure (Section III.E.6) operations which deviate from normal operations as specified in Section, III.E.1, Section III.E.5 and Section III.E.6. At a minimum, the ash storage and handling operations log shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.1212).

Reporting

- E.15. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- E.16. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- E.17. The semiannual reporting shall provide (ARM 17.8.1212):
 - a. A summary of the results of any source testing that was performed during the reporting period;
 - b. A summary of all maintenance and inspection activities performed in accordance with the I&M Plan in Appendix E of this permit;
 - c. A summary of all visual observations monitoring compliance with the visual survey requirement(s); and
 - d. Certification that records were established and maintained as required in Section III.E.14.

F. EU005 – Boiler Pre-Heater (60 MMBtu/hr)

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
F.1, F.6, F.10, F.11, F.15, F.16, F.17	Opacity	20%	Method 9	As required by Department	Semiannual
			COMS	Ongoing	
F.2, F.7, F.12, F.16, F.17	Heat Input Limit	60 MMBtu/hr	Recordkeeping	Ongoing	Semiannual
F.3, F.8, F.13, F.16, F.17	Fuel Type	Propane or Diesel Fuel Only	Recordkeeping	Ongoing	Semiannual
F.4, F.8, F.13, F.16, F.17	Operational Limits	Automatic Shut-Off; Startup, Shut-Down, Malfunction, and Commissioning Operations Only; No Operations During Electrical Production	Recordkeeping	Ongoing	Semiannual
F.5, F.9, F.14, F.16, F.17	Limited Operating Hours	500 hours/12-month rolling average	Recordkeeping	Ongoing	Semiannual

Conditions

- F.1. TRP shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, and not subject to 40 CFR Part 60, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- F.2. The boiler pre-heater shall be limited to a maximum heat input capacity of 60 MMBtu/hr (ARM 17.8.749).
- F.3. The boiler pre-heater may be fired on propane or diesel fuel only (ARM 17.8.749).
- F.4. The boiler pre-heater shall be equipped with an automatic shut-off device, which is activated when the coal feeder becomes operational. Boiler pre-heater operations shall be limited to startup, shutdown, malfunction, and boiler commissioning operations. TRP shall not operate the boiler pre-heater when electricity is being generated through boiler operations or when the boiler fuel feed (wood and/or coal) is operational (ARM 17.8.749).
- F.5. The boiler pre-heater shall be limited to a maximum of 500 hours of operation during any rolling 12-month time period (ARM 17.8.749).

Compliance Demonstration

- F.6. Monitoring compliance with the opacity limit for boiler pre-heater operations shall be determined by a Method 9 source test, as required by the Department. In addition, TRP shall use the data from the COMS to monitor ongoing compliance with the applicable opacity limit for the boiler pre-heater operations (ARM 17.8.1213).
- F.7. TRP shall maintain a daily operations log monitoring compliance with the boiler pre-heater hourly heat input limit in Section III.F.2. The log shall include, at a minimum, the required information, the date, and the initials of the documenting personnel (ARM 17.8.1213).

- F.8. Compliance monitoring for the boiler fuel requirement (Section III.F.3) and the boiler pre-heater operational limits (Section III.F.4) shall be accomplished through recordkeeping (ARM 17.8.1213).
- F.9. TRP shall document, by month, the boiler pre-heater operating hours. By the 25th day of each month, TRP shall total the boiler pre-heater operating hours for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section III.F.5. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

Recordkeeping

- F.10. All source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site. The reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- F.11. TRP shall maintain a record of all measurements from the COMS. The COMS records shall be retained on site for at least 5 years following the date of such measurements. TRP shall supply these records to the Department upon request (ARM 17.8.749).
- F.12. TRP shall maintain on site a daily operations log monitoring compliance with the hourly boiler pre-heater heat input limit in Section III.F.2. All records shall include the required information, the date, the time, and the initials of the documenting personnel (ARM 17.8.1212).
- F.13. TRP shall maintain on site a boiler pre-heater operations log documenting any boiler pre-heater fuel use (Section III.F.3) and boiler pre-heater operations (Section III.F.4) which deviate from normal operations as specified in Section III.F.3 and Section III.F.4. At a minimum, the boiler pre-heater operations log shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.1212).
- F.14. TRP shall maintain a log monitoring compliance with the boiler pre-heater annual operating limit in Section III.F.5. All records shall include the required information, the date, the time, and the initials of the documenting personnel (ARM 17.8.1212).

Reporting

- F.15. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- F.16. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- F.17. The semiannual reporting shall provide (ARM 17.8.1212):
- a. A summary of the results of any source testing that was performed during the reporting period;
 - b. A summary of the applicable boiler pre-heater operations COMS data;
 - c. A summary of the daily operations log monitoring compliance with the boiler pre-heater heat input limit and the fuel type requirement;

- d. A summary of the log documenting the reason for boiler pre-heater operations;
- e. Certification that records were established and maintained as required in Section III.F.13; and
- f. A summary of the log monitoring compliance with the boiler pre-heater annual hourly operations limit.

G. EU006 – Refractory Brick Curing Heaters (60 MMBtu/hr)

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
G.1, G.6, G.10, G.11, G.15, G.16, G.17	Opacity	20%	Method 9	As Required by Department and Section III.A.1	Semiannual
			Visual Surveys	Upon Operation	
G.2, G.7, G.12, G.16, G.17	Heat Input Limit	60 MMBtu/hr	Recordkeeping	Ongoing	Semiannual
G.3, G.8, G.13, G.16, G.17	Limited Operating Hours	500 hours/12-month rolling period	Recordkeeping	Ongoing	Semiannual
G.4, G.9, G.14, G.16, G.17	Operational Limit	Curing Refractory Brick Only	Recordkeeping	Ongoing	Semiannual
G.5, G.9, G.14, G.16, G.17	Operational Limits	No Operations During Electrical Production	Recordkeeping	Ongoing	Semiannual

Conditions

- G.1. TRP shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, and not subject to 40 CFR Part 60, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- G.2. The refractory curing heater(s) shall be limited to a combined maximum heat input capacity of 60 MMBtu/hr (ARM 17.8.749).
- G.3. The refractory curing heater(s) shall be limited to a maximum of 500 hours of operation per heater during any rolling 12-month time period (ARM 17.8.749).
- G.4. TRP may operate propane-fired boiler refractory brick pre-heaters only for the purpose of curing boiler refractory brick (ARM 17.8.749).
- G.5. TRP shall not operate the refractory curing heater(s) when electricity is being generated through boiler operations or when the boiler fuel feed (wood and/or coal) is operational (ARM 17.8.749).

Compliance Demonstration

- G.6. Monitoring compliance with the opacity limit for refractory curing heater(s) operations shall be determined by a Method 9 source test, as required by the Department and Section III.A.1 (ARM 17.8.1213).

In addition, each time the refractory curing heater(s) are operated, TRP shall conduct an initial survey of the visible emissions from refractory curing heater(s) operations. At least once during refractory curing operations, during daylight hours, TRP shall visually survey emissions from refractory curing operations for sources of excessive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, TRP shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then TRP shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve TRP of a liability for a violation determined using Method 9 (ARM 17.8.1213).

- G.7. TRP shall maintain a daily operations log monitoring compliance with the refractory curing heater heat input limit in Section III.G.2. The log shall include, at a minimum, the required information, the date, and the initials of the documenting personnel (ARM 17.8.1213).
- G.8. TRP shall document, by month, the refractory curing heater(s) operating hours. By the 25th day of each month, TRP shall total the refractory curing heaters operating hours for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section III.G.3. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- G.9. Compliance monitoring for the refractory curing heater(s) operational requirements in Section III.G.4 and Section III.G.5 shall be accomplished through recordkeeping (ARM 17.8.1213).

Recordkeeping

- G.10. All source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site. The reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- G.11. TRP shall maintain on-site a log containing all visual observations monitoring compliance with the visual survey requirement(s) in Section III.G.6. The log shall include, at a minimum, the required information, the date, the time, and the initials of the documenting personnel (ARM 17.8.1212).
- G.12. TRP shall maintain on-site a daily operations log monitoring compliance with the refractory brick curing heater(s) heat input limit in Section III.G.2. All records shall include the required information, the date, the time, and the initials of the documenting personnel (ARM 17.8.1212).
- G.13. TRP shall maintain a log monitoring compliance with the refractory curing heater(s) annual operating limit in Section III.G.3. All records shall include the required information, the date, the time, and the initials of the documenting personnel (ARM 17.8.1212).
- G.14. TRP shall maintain on site a refractory curing heater(s) operations log documenting any refractory curing heater operations (Section III.G.4 and Section III.G.5) which deviate from normal operations as specified in Section III.G.4 and Section III.G.5. At a minimum, the refractory curing heater operations log shall include the required information, the date, and the initials of the documenting personnel (ARM 17.8.1212).

Reporting

- G.15. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- G.16. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- G.17. The semiannual reporting shall provide (ARM 17.8.1212):
- A summary of the results of any source testing that was performed during the reporting period;
 - A summary of all visual observations monitoring compliance with the visual survey requirement(s);
 - A summary of the daily operations log monitoring compliance with the refractory curing heater(s) heat input limit in Section III.G.2;
 - A summary of the log monitoring compliance with the refractory curing heater(s) annual hourly operations limit in Section III.G.3; and
 - Certification that records were established and maintained as required in Section III.G.14.

H. EU007 – Truck Traffic/Haul Roads

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Demonstration		Reporting Requirements
			Method	Frequency	
H.1, H.3, H.5, H.6, H.8, H.9, H.10	Opacity	20%	Method 9	As Required by the Department and Section III.A.1	Semiannual
			Visual Surveys	Weekly	
H.2, H.4, H.7, H.9, H.10	Opacity	20%	Reasonable Precautions	As Necessary	Semiannual

Conditions

- H.1. TRP shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- H.2. TRP shall not cause or authorize the use of any access roads, parking lots, or the general plant area without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308(2)).

Compliance Demonstration

- H.3. Monitoring compliance with the opacity limit for truck traffic/haul roads shall be determined by a Method 9 source test conducted as required by the Department and Section III.A.1 (ARM 17.8.1213).

In addition, TRP shall conduct a weekly visual survey of the visible fugitive emissions from on-site truck traffic/haul roads. Once per calendar week during daylight hours, TRP shall visually survey fugitive emissions from truck traffic/haul roads for sources of excessive fugitive emissions. For the purpose of this survey, excessive fugitive emissions are considered to be any visible emissions, which meet or exceed 15% opacity. The person conducting the survey does not have to be an EPA Method 9 certified observer. However, the individual must have been certified as a Method 9 observer within the previous 2 years of the visual survey being performed. If sources of excessive emissions are identified, TRP shall immediately conduct a Method 9 or take corrective action to contain or minimize the source of emissions. If corrective actions are taken, then TRP shall immediately conduct a subsequent visual survey to monitor compliance. The person conducting the visual survey shall record the results of the survey in a log, including any corrective action taken. Conducting a visual survey does not relieve TRP of a liability for a violation determined using Method 9 (ARM 17.8.1213).

- H.4. TRP shall treat all unpaved portions of the access roads, parking lots, and general plant area with fresh water and/or chemical dust suppressant as necessary to monitor compliance with the reasonable precautions limitation (ARM 17.8.749).

Recordkeeping

- H.5. All source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site. The reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- H.6. TRP shall maintain on-site a log containing all visual observations monitoring compliance with the visual survey requirement(s) in Section III.H.3. The log shall include, at a minimum, the required information, the date, the time, and the initials of the documenting personnel (ARM 17.8.1212).
- H.7. TRP shall maintain on-site a log of the reasonable precautions taken as required by Section III.H.4. At a minimum, each log entry must include the date, time, summary of action taken, and the initials of the documenting personnel (ARM 17.8.1212).

Reporting

- H.8. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).
- H.9. The annual compliance certification report required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).
- H.10. The semiannual reporting shall provide (ARM 17.8.1212):
- a. A summary of results of any source testing that was performed during the reporting period;
 - b. A summary of all visual observations monitoring compliance with the visual survey requirement(s); and
 - c. Certification that records were established and maintained as required in Section III.H.7.

I. EU008 - Emergency Engine/Generator (2220 hp)

Condition(s)	Pollutant/Parameter	Permit Limit	Compliance Method	Demonstration Method Frequency	Reporting Requirements
I.1, I.6, I.9, I.12, I.13	Opacity	20%	Burning low sulfur diesel fuel	On-going	Semiannual
I.2, I.6, I.9, I.12, I.13	Particulate from fuel combustion	$E = 1.026 * H^{-0.233}$	Burning low sulfur diesel fuel	On-going	Semiannual
I.3, I.6, I.9, I.12, I.13	Sulfur compounds in fuel	50 gr/100scf	Burning low sulfur diesel fuel	On-going	Semiannual
I.4, I.7, I.10, I.12, I.13	Engine Operation	200 hrs/rolling 12-month time period	Log	As needed	Semiannual
I.5, I.8, I.11, I.12, I.13	40 CFR 60, Subpart IIII	40 CFR 60, Subpart IIII	40 CFR 60, Subpart IIII	40 CFR 60, Subpart IIII	Semiannual

Conditions

- I.1 TRP shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304(2)).
- I.2 TRP shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of $E = 1.026 * H^{-0.233}$ for existing fuel burning equipment, where: H = heat input capacity in MMBtu/hr and E = maximum allowable emission rate in lb/MMBtu (ARM 17.8.309).
- I.3 TRP shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains/100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions (ARM 17.8.322(5)).
- I.4 TRP shall not operate more than one, emergency, diesel fuel-fired engine/generator at any given time. The maximum rated design capacity of this engine/generator shall not exceed 2,220 horsepower (hp) and operation of this engine/generator shall not exceed 200 hours during any rolling 12-month time period (ARM 17.8.749).
- I.5 TRP shall comply with all applicable standards and limitations, and the reporting, recordkeeping and notification requirements contained in 40 CFR 60, Subparts A and IIII – Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE) (ARM 17.8.340 and 40 CFR 60, Subparts A and IIII).

Compliance Demonstration

- I.6 Compliance with the opacity, particulate from fuel combustion, and sulfur compounds in fuel requirements in Sections III.I.1, III.I.2, and III.I.3, may be satisfied by using low-sulfur diesel fuel, on an on-going basis (ARM 17.8.1213).
- I.7 TRP shall log the date and reason for operating the emergency engine/generator, the hours of operation, the estimated amount of fuel consumed by the emergency engine/generator, and the operator’s initials (ARM 17.8.1213).

- I.8 TRP shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, Standards of Performance for the Stationary CI-ICE (ARM 17.8.340, ARM 17.8.1213, and 40 CFR 60, Subpart IIII).

Recordkeeping

- I.9 TRP shall maintain a record documenting any instance in which a fuel other than low sulfur diesel fuel was used in the 2220 hp emergency engine/generator to monitor compliance with Sections III.I.1, III.I.2, and III.I.3. The log shall include date, time, duration of alternate fuel use, and operator's initials (ARM 17.8.1212).
- I.10 TRP shall maintain on-site a log containing all hours of operation of the low sulfur, diesel fuel-fired engine/generator in both hours per month and hours per year. In addition to the information required in Section III.I.7, TRP shall record the time of operation of the engine and the reason the engine was in operation during that time to meet the requirement in Section III.I.4. The log shall include, at a minimum, the day, date, time, and the initials of the documenting personnel in addition to the monthly and annual hours of operation (ARM 17.8.1212).
- I.11 TRP shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, Standards of Performance for Stationary CI-ICE for any applicable diesel engine (ARM 17.8.340, ARM 17.8.1213, and 40 CFR 60, Subparts A and IIII).

Reporting

- I.12 The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements.
- I.13 The semiannual compliance monitoring report shall provide (ARM 17.8.1212):
- a. Any instance in which fuel(s) other than low sulfur diesel fuel was used to fuel the emergency engine/generators(s) (including information required in the log);
 - b. A summary of the hours of operation of the emergency engine/generator(s) (including the information in the log).
 - c. Reference of any reporting/notification during that semiannual period, including date and nature of notice, pursuant to 40 CFR 60, Subparts A and IIII.

SECTION IV. NON-APPLICABLE REQUIREMENTS

Air Quality Administrative Rules of Montana and Federal Regulations identified as not applicable to the facility or to a specific emissions unit at the time of the permit issuance are listed below (ARM 17.8.1214). The following list does not preclude the need to comply with any new requirements that may become applicable during the permit term.

A. Facility-Wide

The following table contains non-applicable requirements, which are administrated by the Air Resources Management Bureau of the Department of Environmental Quality.

Rule Citation	Reason
40 CFR 57, 40 CFR 60, Subpart B, 40 CFR 60, Subpart C, Cb, Cc, Cd, and Ce 40 CFR 60, Subpart D, Da, and Dc, 40 CFR 60, Subpart E, Ea, Eb, and Ec 40 CFR 60, Subpart F through Subpart H 40 CFR 60, Subpart J through Subpart M 40 CFR 60, Subpart N and Na, 40 CFR 60, Subpart O through Subpart Z, 40 CFR 60, Subpart AA and AAa, 40 CFR 60, Subpart BB through Subpart EE, 40 CFR 60, Subpart GG through Subpart HH, 40 CFR 60, Subpart KK through Subpart NN, 40 CFR 60, Subpart PP through Subpart XX, 40 CFR 60, Subpart AAA and Subpart BBB, 40 CFR 60, Subpart DDD, 40 CFR 60, Subpart FFF through Subpart LLL, 40 CFR 60, Subpart NNN, 40 CFR 60, Subpart PPP through Subpart WWW, 40 CFR 60, Subpart AAAA through DDDD, 40 CFR 60, Subpart HHHH 40 CFR 60, Subpart KKKK 40 CFR 61, Subpart B through Subpart F, 40 CFR 61, Subpart H through Subpart L, 40 CFR 61 Subpart N through Subpart R, 40 CFR 61, Subpart T, 40 CFR 61, Subpart V and Subpart W, 40 CFR 61, Subpart Y, 40 CFR 61, Subpart BB, 40 CFR 61, Subpart FF. 40 CFR 63, Subpart F through Subpart J, 40 CFR 63, Subpart L through Subpart O, 40 CFR 63, Subpart Q through Subpart S, 40 CFR 63, Subpart T through Subpart Y, 40 CFR 63, Subpart AA through Subpart EE, 40 CFR 63, Subpart GG through Subpart MM 40 CFR 63, Subpart OO through Subpart YY 40 CFR 63, Subpart CCC through EEE 40 CFR 63, Subpart GGG through Subpart JJJ, 40 CFR 63, Subpart LLL through Subpart RRR, 40 CFR 63, Subpart TTT through Subpart VVV, 40 CFR 63, Subpart XXX, 40 CFR 63, Subpart AAAA, 40 CFR 63, Subpart CCCC through Subpart KKKK,	These rules are not applicable because the facility is not listed in the source category cited in the rules.

40 CFR 63, Subpart MMMM through Subpart ZZZZ 40 CFR 63, Subpart AAAAA through Subpart CCCCC 40 CFR 63, Subpart EEEEE through Subpart TTTTT 40 CFR 63, Subpart DDDDD through Subpart GGGGG 40 CFR 72 – 40 CFR 78 40 CFR 85 and 40 CFR 86 40 CFR 96 and 40 CFR 97 ARM 17.8.321, ARM 17.8.323, ARM 17.8.330 through 17.8.334, ARM 17.8.342, ARM 17.8.610, ARM 17.8.770	
ARM 17.8.316, ARM 17.8.320, ARM 17.8.324	These rules are not applicable because the facility does not have the specific emissions unit cited in the rules.
40 CFR 55	This regulation contains requirements to control air pollution from outer continental shelf sources, and does not contain requirements specifically relevant to this facility.
40 CFR 82 40 CFR 87 40 CFR 88 40 CFR 89 40 CFR 90 40 CFR 91 40 CFR 92 40 CFR 94	This rule refers to a process, equipment, or activity that is not used or produced at this facility.
40 CFR 93 40 CFR 95	This regulation does not contain facility level requirements.
40 CFR 63, Subpart DDDDD	This pollutant is not emitted by the source or not emitted by the source in an amount triggering applicable requirements.

B. Emission Units

The permit application identified applicable requirements: non-applicable requirements for individual or specific emission units were not listed.

SECTION V. GENERAL PERMIT CONDITIONS

A. Compliance Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(a)-(c)&(e), §1206(6)(c)&(b)

1. The permittee must comply with all conditions of the permit. Any noncompliance with the terms or conditions of the permit constitutes a violation of the Montana Clean Air Act, and may result in enforcement action, permit modification, revocation and reissuance, or termination, or denial of a permit renewal application under ARM Title 17, Chapter 8, Subchapter 12.
2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. If appropriate, this factor may be considered as a mitigating factor in assessing a penalty for noncompliance with an applicable requirement if the source demonstrates that both the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations, and that such health, safety or environmental impacts were unforeseeable and could not have otherwise been avoided.
4. The permittee shall furnish to the Department, within a reasonable time set by the Department (not to be less than 15 days), any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of those records that are required to be kept pursuant to the terms of the permit. This subsection does not impair or otherwise limit the right of the permittee to assert the confidentiality of the information requested by the Department, as provided in 75-2-105, MCA.
5. Any schedule of compliance for applicable requirements with which the source is not in compliance with at the time of permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it was based.
6. For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis unless a more detailed plan or schedule is required by the applicable requirement or the Department.

B. Certification Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1207 and §1213(7)(a)&(c)-(d)

1. Any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12, shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
2. Compliance certifications shall be submitted by February 15th of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. Each certification must include the required information for the previous calendar year (i.e., January 1 – December 31).

3. Compliance certifications shall include the following:
 - a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The identification of the method(s) or other means used by the owner or operator for determining the status of compliance with each term and condition during the certification period, consistent with ARM 17.8.1212;
 - c. The status of compliance with each term and condition for the period covered by the certification, *including whether compliance during the period was continuous or intermittent* (based on the method or means identified in ARM 17.8.1213(7)(c)(ii), as described above); and
 - d. Such other facts as the Department may require to determine the compliance status of the source.
4. All compliance certifications must be submitted to the Environmental Protection Agency, as well as to the Department, at the addresses listed in the Notification Addresses Appendix of this permit.

C. Permit Shield

ARM 17.8, Subchapter 12, Operating Permit Program §1214(1)-(4)

1. The applicable requirements and non-federally enforceable requirements are included and specifically identified in this permit and the permit includes a precise summary of the requirements not applicable to the source. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements and any non-federally enforceable requirements as of the date of permit issuance.
2. The permit shield described in 1 above shall remain in effect during the appeal of any permit action (renewal, revision, reopening, or revocation and reissuance) to the Board of Environmental Review (Board), until such time as the Board renders its final decision.
3. Nothing in this permit alters or affects the following:
 - a. The provisions of Section 7603 of the FCAA, including the authority of the administrator under that section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the Acid Rain Program, consistent with Section 7651g(a) of the FCAA;
 - d. The ability of the administrator to obtain information from a source pursuant to Section 7414 of the FCAA;
 - e. The ability of the Department to obtain information from a source pursuant to the Montana Clean Air Act, Title 75, Chapter 2, MCA;
 - f. The emergency powers of the Department under the Montana Clean Air Act, Title 75, Chapter 2, MCA; and

- g. The ability of the Department to establish or revise requirements for the use of Reasonably Available Control Technology (RACT) as defined in ARM Title 17, Chapter 8. However, if the inclusion of a RACT into the permit pursuant to ARM Title 17, Chapter 8, Subchapter 12, is appealed to the Board, the permit shield, as it applies to the source's existing permit, shall remain in effect until such time as the Board has rendered its final decision.
- 4. Nothing in this permit alters or affects the ability of the Department to take enforcement action for a violation of an applicable requirement or permit term demonstrated pursuant to ARM 17.8.106, Source Testing Protocol.
- 5. Pursuant to ARM 17.8.132, for the purpose of submitting a compliance certification, nothing in these rules shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance. However, when compliance or noncompliance is demonstrated by a test or procedure provided by permit or other applicable requirements, the source shall then be presumed to be in compliance or noncompliance unless that presumption is overcome by other relevant credible evidence.
- 6. The permit shield will not extend to minor permit modifications or changes not requiring a permit revision (see Sections I & J).
- 7. The permit shield will extend to significant permit modifications and transfer or assignment of ownership (see Sections K & O).

D. Monitoring, Recordkeeping, and Reporting Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1212(2)&(3)

- 1. Unless otherwise provided in this permit, the permittee shall maintain compliance monitoring records that include the following information:
 - a. The date, place as defined in the permit, and time of sampling or measurement;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions at the time of sampling or measurement.
- 2. The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All monitoring data, support information, and required reports and summaries may be maintained in computerized form at the plant site if the information is made available to Department personnel upon request, which may be for either hard copies or computerized format. Strip-charts must be maintained in their original form at the plant site and shall be made available to Department personnel upon request.

3. The permittee shall submit to the Department, at the addresses located in the Notification Addresses Appendix of this permit, reports of any required monitoring by February 15th and August 15th of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. The monitoring report submitted on February 15 of each year must include the required monitoring information for the period of July 1 through December 31 of the previous year. The monitoring report submitted on August 15 of each year must include the required monitoring information for the period of January 1 through June 30 of the current year. All instances of deviations from the permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official, consistent with ARM 17.8.1207.

E. Prompt Deviation Reporting

ARM 17.8, Subchapter 12, Operating Permit Program §1212(3)(c)

The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. To be considered prompt, deviations shall be reported as part of the routine reporting requirements under ARM 17.8.1212(3)(b) and, if applicable, in accordance with the malfunction reporting requirements under ARM 17.8.110, unless otherwise specified in an applicable requirement.

F. Emergency Provisions

ARM 17.8, Subchapter 12, Operating Permit Program §1201(13) and §1214(5), (6)&(8)

1. An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and causes the source to exceed a technology-based emission limitation under this permit due to the unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of reasonable preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates through properly signed, contemporaneous logs, or other relevant evidence, that:
 - a. An emergency occurred and the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit; and
 - d. The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirements of ARM 17.8.1212(3)(c). This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
3. These emergency provisions are in addition to any emergency, malfunction or upset provision contained in any applicable requirement.

G. Inspection and Entry

ARM 17.8, Subchapter 12, Operating Permit Program §1213(3)&(4)

1. Upon presentation of credentials and other requirements as may be required by law, the permittee shall allow the Department, the administrator, or an authorized representative (including an authorized contractor acting as a representative of the Department or the administrator) to perform the following:
 - a. Enter the premises where a source required to obtain a permit is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
 - c. Inspect at reasonable times any facilities, emission units, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. As authorized by the Montana Clean Air Act and rules promulgated thereunder, sample or monitor, at reasonable times, any substances or parameters at any location for the purpose of assuring compliance with the permit or applicable requirements.
2. The permittee shall inform the inspector of all workplace safety rules or requirements at the time of inspection. This section shall not limit in any manner the Department's statutory right of entry and inspection as provided for in 75-2-403, MCA.

H. Fee Payment

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(f) and ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation, and Open Burning Fees §505(3)-(5) (STATE ONLY)

1. The permittee must pay application and operating fees, pursuant to ARM Title 17, Chapter 8, Subchapter 5.
2. Annually, the Department shall provide the permittee with written notice of the amount of the fee and the basis for the fee assessment. The air quality operation fee is due 30 days after receipt of the notice, unless the fee assessment is appealed pursuant to ARM 17.8.511. If any portion of the fee is not appealed, that portion of the fee that is not appealed is due 30 days after receipt of the notice. Any remaining fee, which may be due after the completion of an appeal, is due immediately upon issuance of the Board's decision or upon completion of any judicial review of the Board's decision.
3. If the permittee fails to pay the required fee (or any required portion of an appealed fee) within 90 days of the due date of the fee, the Department may impose an additional assessment of 15% of the fee (or any required portion of an appealed fee) or \$100, whichever is greater, plus interest on the fee (or any required portion of an appealed fee), computed at the interest rate established under 15-31-510(3), MCA.

I. Minor Permit Modifications

ARM 17.8, Subchapter 12, Operating Permit Program §1226(3)&(11)

1. An application for a minor permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation, or deletion, and may reference any required information that has been previously submitted.

2. The permit shield under ARM 17.8.1214 will not extend to any minor modifications processed pursuant to ARM 17.8.1226.

J. Changes Not Requiring Permit Revision

ARM 17.8, Subchapter 12, Operating Permit Program §1224(1)-(3), (5)&(6)

1. The permittee is authorized to make changes within the facility as described below, provided the following conditions are met:
 - a. The proposed changes do not require the permittee to obtain a Montana Air Quality Permit (MAQP) under ARM Title 17, Chapter 8, Subchapter 7;
 - b. The proposed changes are not modifications under Title I of the FCAA, or as defined in ARM Title 17, Chapter 8, Subchapters 8, 9, or 10;
 - c. The emissions resulting from the proposed changes do not exceed the emissions allowable under this permit, whether expressed as a rate of emissions or in total emissions;
 - d. The proposed changes do not alter permit terms that are necessary to enforce applicable emission limitations on emission units covered by the permit; and
 - e. The facility provides the administrator and the Department with written notification at least 7 days prior to making the proposed changes.
2. The permittee and the Department shall attach each notice provided pursuant to 1.e above to their respective copies of this permit.
3. Pursuant to the conditions above, the permittee is authorized to make Section 502(b)(10) changes, as defined in ARM 17.8.1201(30), without a permit revision. For each such change, the written notification required under 1.e above shall include a description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
4. The permittee may make a change not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided the following conditions are met:
 - a. Each proposed change does not weaken the enforceability of any existing permit conditions;
 - b. The Department has not objected to such change;
 - c. Each proposed change meets all applicable requirements and does not violate any existing permit term or condition; and
 - d. The permittee provides contemporaneous written notice to the Department and the administrator of each change that is above the level for insignificant emission units as defined in ARM 17.8.1201(22) and 17.8.1206(3), and the written notice describes each such change, including the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
5. The permit shield authorized by ARM 17.8.1214 shall not apply to changes made pursuant to ARM 17.8.1224(3) and (5), but is applicable to terms and conditions that allow for increases and decreases in emissions pursuant to ARM 17.8.1224(4).

K. Significant Permit Modifications

ARM 17.8, Subchapter 12, Operating Permit Program §1227(1), (3)&(4)

1. The modification procedures set forth in 2 below must be used for any application requesting a significant modification of this permit. Significant modifications include the following:
 - a. Any permit modification that does not qualify as either a minor modification or as an administrative permit amendment;
 - b. Every significant change in existing permit monitoring terms or conditions;
 - c. Every relaxation of permit reporting or recordkeeping terms or conditions that limit the Department's ability to determine compliance with any applicable rule, consistent with the requirements of the rule; or
 - d. Any other change determined by the Department to be significant.
2. Significant modifications shall meet all requirements of ARM Title 17, Chapter 8, including those for applications, public participation, and review by affected states and the administrator, as they apply to permit issuance and renewal, except that an application for a significant permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation or deletion.
3. The permit shield provided for in ARM 17.8.1214 shall extend to significant modifications.

L. Reopening for Cause

ARM 17.8, Subchapter 12, Operating Permit Program §1228(1)&(2)

This permit may be reopened and revised under the following circumstances:

1. Additional applicable requirements under the FCAA become applicable to the facility when the permit has a remaining term of 3 or more years. Reopening and revision of the permit shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required under ARM 17.8.1228(1)(a) if the effective date of the applicable requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms or conditions have been extended pursuant to ARM 17.8.1220(12) or 17.8.1221(2);
2. Additional requirements (including excess emission requirements) become applicable to an affected source under the Acid Rain Program. Upon approval by the administrator, excess emission offset plans shall be deemed incorporated into the permit;
3. The Department or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit; or
4. The administrator or the Department determines that the permit must be revised or revoked and reissued to ensure compliance with the applicable requirements.

M. Permit Expiration and Renewal

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(g), §1220(11)&(12), and §1205(2)(d)

1. This permit is issued for a fixed term of 5 years.

2. Renewal of this permit is subject to the same procedural requirements that apply to permit issuance, including those for application, content, public participation, and affected state and administrator review.
3. Expiration of this permit terminates the permittee's right to operate unless a timely and administratively complete renewal application has been submitted consistent with ARM 17.8.1221 and 17.8.1205(2)(d). If a timely and administratively complete application has been submitted, all terms and conditions of the permit, including the application shield, remain in effect after the permit expires until the permit renewal has been issued or denied.
4. For renewal, the permittee shall submit a complete air quality operating permit application to the Department not later than 6 months prior to the expiration of this permit, unless otherwise specified. If necessary to ensure that the terms of the existing permit will not lapse before renewal, the Department may specify, in writing to the permittee, a longer time period for submission of the renewal application. Such written notification must be provided at least 1 year before the renewal application due date established in the existing permit.

N. Severability Clause

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(i)&(l)

1. The administrative appeal or subsequent judicial review of the issuance by the Department of an initial permit under this subchapter shall not impair in any manner the underlying applicability of all applicable requirements, and such requirements continue to apply as if a final permit decision had not been reached by the Department.
2. If any provision of a permit is found to be invalid, all valid parts that are severable from the invalid part remain in effect. If a provision of a permit is invalid in one or more of its applications, the provision remains in effect in all valid applications that are severable from the invalid applications.

O. Transfer or Assignment of Ownership

ARM 17.8, Subchapter 12, Operating Permit Program §1225(2)&(4)

1. If an administrative permit amendment involves a change in ownership or operational control, the applicant must include in its request to the Department a written agreement containing a specific date for the transfer of permit responsibility, coverage and liability between the current and new permittee.
2. The permit shield provided for in ARM17.8.1214 shall not extend to administrative permit amendments.

P. Emissions Trading, Marketable Permits, Economic Incentives

ARM 17.8, Subchapter 12, Operating Permit Program §1226(2)

Notwithstanding ARM 17.8.1226(1) and (7), minor air quality operating permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in the Montana State Implementation Plan or in applicable requirements promulgated by the administrator.

Q. No Property Rights Conveyed

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

R. Testing Requirements

ARM 17.8, Subchapter 1, General Provisions §105

The permittee shall comply with ARM 17.8.105.

S. Source Testing Protocol

ARM 17.8, Subchapter 1, General Provisions §106

The permittee shall comply with ARM 17.8.106.

T. Malfunctions

ARM 17.8, Subchapter 1, General Provisions §110

The permittee shall comply with ARM 17.8.110.

U. Circumvention

ARM 17.8, Subchapter 1, General Provisions §111

The permittee shall comply with ARM 17.8.111.

V. Motor Vehicles

ARM 17.8, Subchapter 3, Emission Standards §325

The permittee shall comply with ARM 17.8.325.

W. Annual Emissions Inventory

ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees §505 (STATE ONLY)

The permittee shall supply the Department with annual production and other information for all emission units necessary to calculate actual or estimated actual amount of air pollutants emitted during each calendar year. Information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request, unless otherwise specified in this permit. Information shall be in the units required by the Department.

X. Open Burning

ARM 17.8, Subchapter 6, Open Burning §604, 605 and 606

The permittee shall comply with ARM 17.8.604, 605 and 606.

Y. Montana Air Quality Permits

ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources §745 and 764 (ARM 17.8.745(1) and 764(1)(b) are STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

1. Except as specified, no person shall construct, install, modify or use any air contaminant source or stack associated with any source without first obtaining a permit from the Department or Board. A permit is not required for those sources or stacks as specified by ARM 17.8.744(1)(a)-(k).
2. The permittee shall comply with ARM 17.8.743, 744, 745, 748, and 764.

3. ARM 17.8.745(1) specifies de minimis changes as construction or changed conditions of operation at a facility holding a MAQP issued under Chapter 8 that does not increase the facility's potential to emit by more than 15 tons per year of any pollutant, except (STATE ENFORCEABLE ONLY until approved by the EPA as part of the SIP):
 - a. Any construction or changed condition that would violate any condition in the facility's existing air quality permit or any applicable rule contained in Chapter 8 is prohibited, except as provided in ARM 17.8.745(2);
 - b. Any construction or changed conditions of operation that would qualify as a major modification under Subchapters 8, 9 or 10 of Chapter 8;
 - c. Any construction or changed condition of operation that would affect the plume rise or dispersion characteristic of emissions that would cause or contribute to a violation of an ambient air quality standard or ambient air increment as defined in ARM 17.8.804;
 - d. Any construction or improvement project with a potential to emit more than 15 tons per year may not be artificially split into smaller projects to avoid air quality permitting; or
 - e. Emission reductions obtained through offsetting within a facility are not included when determining the potential emission increase from construction or changed conditions of operation, unless such reductions are made federally enforceable.
4. Any facility making a de minimis change pursuant to ARM 17.8.745(1) shall notify the Department if the change would include a change in control equipment, stack height, stack diameter, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1) (STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP).

Z. National Emission Standard for Asbestos

40 CFR, Part 61, Subpart M

The permittee shall not conduct any asbestos abatement activities except in accordance with 40 CFR 61, Subpart M (National Emission Standard for Hazardous Air Pollutants for Asbestos).

AA. Asbestos

ARM 17.74, Subchapter 3, General Provisions and Subchapter 4, Fees

The permittee shall comply with ARM 17.74.301, *et seq.*, and ARM 17.74.401, *et seq.* (State only)

BB. Stratospheric Ozone Protection – Servicing of Motor Vehicle Air Conditioners

40 CFR, Part 82, Subpart B

If the permittee performs a service on motor vehicles and this service involves ozone-depleting substance/refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart B.

CC. Stratospheric Ozone Protection – Recycling and Emission Reductions
40 CFR, Part 82, Subpart F

The permittee shall comply with the standards for recycling and emission reductions in 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B:

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156;
2. Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158;
3. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to §82.161;
4. Persons disposing of small appliances, MVACs and MVAC-like (as defined at §82.152) appliances must comply with recordkeeping requirements pursuant to §82.166;
5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156; and
6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

DD. Emergency Episode Plan

The permittee shall comply with the requirements contained in Chapter 9.7 of the State of Montana Air Quality Control Implementation Plan.

Each major source emitting 100 tons per year located in a Priority I Air Quality Control Region, shall submit to the Department a legally enforceable Emergency Episode Action Plan (EEAP) that details how the source will curtail emissions during an air pollutant emergency episode. The industrial EEAP shall be in accordance with the Department's EEAP and shall be submitted according to a timetable developed by the Department, following Priority I reclassification.

EE. Definitions

Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit, shall have the meaning assigned to them in the referenced regulations.

APPENDICES

APPENDIX A INSIGNIFICANT EMISSION UNITS

Disclaimer: The information in this appendix is not State or Federally enforceable, but is presented to assist TRP, the permitting authority, inspectors, and the public.

Pursuant to ARM 17.8.1201(22)(a), an insignificant emission unit means any activity or emissions unit located within a source that: (i) has a potential to emit less than 5 tons per year of any regulated pollutant; (ii) has a potential to emit less than 500 pounds per year of lead; (iii) has a potential to emit less than 500 pounds per year of hazardous air pollutants listed pursuant to Sec. 7412 (b) of the FCAA; and (iv) is not regulated by an applicable requirement, other than a generally applicable requirement that applies to all emission units subject to Subchapter 12.

List of Insignificant Activities:

The following table of insignificant sources and/or activities were provided by TRP. Because there are no requirements to update such a list, the emission units and/or activities may change from those specified in the table.

Emissions Unit ID	Description
IEU01	Wet Cooling Tower

APPENDIX B DEFINITIONS and ABBREVIATIONS

"Act" means the Clean Air Act, as amended, 42 U.S. 7401, *et seq.*

"Administrative permit amendment" means an air quality operating permit revision that:

- (a) Corrects typographical errors;
- (b) Identifies a change in the name, address or phone number of any person identified in the air quality operating permit, or identifies a similar minor administrative change at the source;
- (c) Requires more frequent monitoring or reporting by TRP;
- (d) Requires changes in monitoring or reporting requirements that the Department deems to be no less stringent than current monitoring or reporting requirements;
- (e) Allows for a change in ownership or operational control of a source if the Department has determined that no other change in the air quality operating permit is necessary, consistent with ARM 17.8.1225; and
- (f) Incorporates any other type of change, which the Department has determined to be similar to those revisions set forth in (a)-(e), above.

"Applicable requirement" means all of the following as they apply to emission units in a source requiring an air quality operating permit (including requirements that have been promulgated or approved by the Department or the administrator through rule making at the time of issuance of the air quality operating permit, but have future-effective compliance dates, provided that such requirements apply to sources covered under the operating permit):

- (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree or judicial or administrative order entered into or issued by the Department, that is contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA;
- (b) Any federally enforceable term, condition or other requirement of any Montana air quality permit issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter, or pursuant to regulations approved or promulgated through rule making under Title I of the FCAA, including parts C and D;
- (c) Any standard or other requirement under Section 7411 of the FCAA, including Section 7411(d);
- (d) Any standard or other requirement under Section 7412 of the FCAA, including any requirement concerning accident prevention under Section 7412(r)(7), but excluding the contents of any risk management plan required under Section 7412(r);
- (e) Any standard or other requirement of the acid rain program under Title IV of the FCAA or regulations promulgated thereunder;
- (f) Any requirements established pursuant to Section 7661c(b) or Section 7414(a)(3) of the FCAA;

- (g) Any standard or other requirement governing solid waste incineration, under Section 7429 of the FCAA;
- (h) Any standard or other requirement for consumer and commercial products, under Section 7511b(e) of the FCAA;
- (i) Any standard or other requirement for tank vessels, under Section 7511b(f) of the FCAA;
- (j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator determines that such requirements need not be contained in an air quality operating permit;
- (k) Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to Section 7661c(e) of the FCAA; and
- (l) Any federally enforceable term or condition of any air quality open burning permit issued by the Department under Subchapter 6.

"Department" means the Montana Department of Environmental Quality.

"Excess Emissions" means any visible emissions from a stack or source, viewed during the visual surveys, believed to exceed the visible emissions during normal operating conditions.

"Excess Fugitive Emissions" means any visible emissions that leave the plant site boundaries.

"Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Section 7412(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.

"FCAA" means the Federal Clean Air Act, as amended.

"Federally enforceable" means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the Montana state implementation plan, and any permit requirement established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA approved program that is incorporated into the Montana state implementation plan and expressly requires adherence to any permit issued under such program.

"Fugitive emissions" means those emissions, which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"General air quality operating permit" or **"general permit"** means an air quality operating permit that meets the requirements of ARM 17.8.1222, covers multiple sources in a source category, and is issued in lieu of individual permits being issued to each source.

"Hazardous air pollutant" means any air pollutant listed as a hazardous air pollutant pursuant to Section 112(b) of the FCAA.

"Non-federally enforceable requirement" means the following as they apply to emission units in a source requiring an air quality operating permit:

- (a) Any standard, rule, or other requirement, including any requirement contained in a consent decree, or judicial or administrative order entered into or issued by the Department, that is not contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA;

- (b) Any term, condition or other requirement contained in any MAQP issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter that is not federally enforceable; and
- (c) Does not include any Montana ambient air quality standard contained in Subchapter 2 of this chapter.

"Permittee" means the owner or operator of any source subject to the permitting requirements of this subchapter, as provided in ARM 17.8.1204, that holds a valid air quality operating permit or has submitted a timely and complete permit application for issuance, renewal, amendment, or modification pursuant to this subchapter.

"Regulated air pollutant" means the following:

- (a) Nitrogen oxides or any volatile organic compounds;
- (b) Any pollutant for which a national ambient air quality standard has been promulgated;
- (c) Any pollutant that is subject to any standard promulgated under Section 7411 of the FCAA;
- (d) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA;
- (e) Any pollutant subject to a standard or other requirement established or promulgated under Section 7412 of the FCAA, including but not limited to the following:
 - (i) Any pollutant subject to requirements under Section 7412(j) of the FCAA. If the administrator fails to promulgate a standard by the date established in Section 7412(e) of the FCAA, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established in Section 7412(e) of the FCAA; and
 - (ii) Any pollutant for which the requirements of Section 7412(g)(2) of the FCAA have been met but only with respect to the individual source subject to Section 7412(g)(2) requirement.

"Responsible official" means one of the following:

- (a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - (ii) The delegation of authority to such representative is approved in advance by the Department.
- (b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;

- (c) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of the environmental protection agency).
- (d) For affected sources: the designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder are concerned, and the designated representative for any other purposes under this subchapter.

Abbreviations:

ARM	Administrative Rules of Montana
ASTM	American Society of Testing Materials
BACT	Best Available Control Technology
BDT	bone dry tons
BTU	British Thermal Unit
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic foot
dscfm	dry standard cubic foot per minute
EEAP	Emergency Episode Action Plan
EPA	U.S. Environmental Protection Agency
EPA Method	Test methods contained in 40 CFR 60, Appendix A
EU	emissions unit
FCAA	Federal Clean Air Act
gr	grains
HAP	hazardous air pollutant
IEU	insignificant emissions unit
Mbdft	thousand board feet
Method 5	40 CFR 60, Appendix A, Method 5
Method 9	40 CFR 60, Appendix A, Method 9
MMbdft	million board feet
MMBTU	million British Thermal Units
NO _x	oxides of nitrogen
NO ₂	nitrogen dioxide
O ₂	oxygen
Pb	lead
PM	particulate matter
PM10	particulate matter less than 10 microns in size
psi	pounds per square inch
scf	standard cubic feet
SIC	Source Industrial Classification
SO ₂	sulfur dioxide
SO _x	oxides of sulfur
TPY	tons per year
U.S.C.	United States Code
VE	visible emissions
VOC	volatile organic compound

APPENDIX C NOTIFICATION ADDRESSES

Compliance Notifications:

Montana Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901
Helena, MT 59620-0901

United States EPA
Air Program Coordinator
Region VIII, Montana Office
10 W. 15th Street, Suite 3200
Helena, MT 59626

Permit Modifications:

Montana Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901
Helena, MT 59620-0901

Office of Partnerships and Regulatory Assistance
Air and Radiation Program
US EPA Region VIII 8P-AR
1595 Wynkoop Street
Denver, CO 80202-1129

APPENDIX D AIR QUALITY INSPECTOR INFORMATION

Disclaimer: The information in this appendix is not State or Federally enforceable, but is presented to assist TRP, permitting authority, inspectors, and the public.

Direction to Plant: The TRP plant is located approximately 3.7 miles east-southeast of Thompson Falls, MT, on the south side of Montana Highway 200, adjacent to the Thompson River Lumber Company mill. The legal description of the site is in the SW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 13, Township 21 North, Range 29 West, Sanders County, MT.

Safety Equipment Required:

Hard Hat
Safety Glasses
Steel-Toed Protective Footwear

Facility Plot Plan: A facility plot plan was included as part of the Title V operating permit application submitted on August 28, 2001. An updated version of the plot plan was provided as part of the complete application for this significant modification and is on file at the Department's offices in Helena and at the Missoula City-County Health Department. A copy of the plan is available on-site or through the Department of Environmental Quality.

**APPENDIX E BAGHOUSE/BIN VENT DUST COLLECTOR STANDARD OPERATING
PROCEDURES (I & M PLAN)**

On February 22, 2005, TRP submitted a complete I&M Plan to the Department. TRP's I&M Plan is available for review at the Department's offices in Helena and the Missoula City-County Health Department and copies of the plan are available from the Department upon request.

APPENDIX F AMBIENT AIR QUALITY MONITORING PLAN (PM₁₀)

Thompson River Power, LLC

1. This ambient air monitoring plan is required and applies to TRP’s electrical and steam co-generation operations near Thompson Falls, in Sanders County, Montana. This monitoring plan may be changed by the Department. All current requirements of this plan are considered conditions of the MAQP.
2. TRP shall install, operate, and maintain a single ambient air quality monitoring station in the vicinity of plant. The exact location of the monitoring site must be approved by the Department and meet all siting requirements contained in the Montana Quality Assurance Manual, including revisions; the EPA Quality Assurance Manual, including revisions; and Parts 50, 53, and 58 of the Code of Federal Regulation; or any other requirements specified by the Department.
3. TRP shall continue air monitoring for at least 5 years after implementation of the ambient air monitoring plan. At that time, the air monitoring data will be reviewed by the Department and the Department will determine if continued monitoring or additional monitoring is warranted. The Department may require continued air monitoring to track long-term impacts of emissions for the facility or require additional ambient air monitoring or analyses if any changes take place in regard to quality and/or quantity of emissions or the area of impact from the emissions.
4. TRP shall monitor the following parameters at the sites and frequencies described below:

Location	Site	Parameter	Frequency
Plant Area 30-089-0009	Thompson River Co-Gen HWY 200	PM ₁₀ ¹ Local Conditions: 85101 Standard Conditions: 81102	Every 3 rd day ² according to EPA monitoring schedule
¹ PM ₁₀ = particulate matter less than 10 microns.			
² Every 3 rd day throughout the year (1/3 schedule)			

5. Data recovery (DR) for all parameters shall be at least 80%, computed on a quarterly and annual basis. The Department may require continued monitoring if this condition is not met. The data recovery shall be calculated using the following equation(s), as applicable:

$$\text{Manual Methods \% DR} = \left[\frac{\text{total number of valid samples collected}}{\text{total number of samples scheduled}} \right] \times 100$$

or

$$\text{Automated Methods \% DR} = \left[\frac{\text{total number of hours possible} - \text{hours lost to QA/QC checks} - \text{hours lost to downtime}}{\text{total number of hours possible}} \right] \times 100$$

6. Any ambient air monitoring changes proposed by TRP must be approved in writing by the Department.
7. TRP shall utilize air monitoring and quality assurance procedures which are equal to or exceed the requirements described in the Montana Quality Assurance Manual, including revisions; the EPA Quality Assurance Manual, including revisions; 40 CFR Parts 53 and 58 of the Code of Federal Regulations; and any other requirements specified by the Department.

8. TRP shall submit quarterly data reports within 45 days after the end of the calendar quarter and an annual data report within 90 days after the end of the calendar year. The annual report may be substituted for the fourth quarterly report if all information in Item 9 below is included in the report.
9. The quarterly report shall consist of a narrative data summary and a data submittal of all data points in AIRS format. This data shall be submitted on a 3" diskette or a compact disc (CD). The narrative data summary shall include:
 - a. A topographic map of appropriate scale showing the air monitoring site locations in relation to the plant, any nearby residences and/or businesses, and the town of Thompson Falls.
 - b. A hard copy of the individual data points;
 - c. The quarterly and monthly means for PM₁₀;
 - d. The first and second highest 24-hour PM₁₀ concentrations and dates;
 - e. A summary of the data collection efficiency;
 - f. A summary of the reasons for missing data;
 - g. A precision and accuracy (audit) summary;
 - h. A summary of any ambient air standard exceedances; and
 - i. Calibration information.
10. The annual data report shall consist of a narrative data summary containing:
 - a. A topographic map of appropriate scale showing the air monitoring site locations in relation to the plant, any nearby residences and/or businesses, and the town of Thompson Falls.
 - b. A pollution trend analysis;
 - c. The annual means for PM₁₀;
 - d. The first and second highest 24-hour PM₁₀ concentrations and dates;
 - e. An annual summary of data collection efficiency;
 - f. An annual summary of precision and accuracy (audit) data;
 - g. An annual summary of any ambient standard exceedance; and
 - h. Recommendations for future monitoring.
11. The Department may audit, or may require TRP to contract with an independent firm to audit the air-monitoring network, the laboratory performing associated analyses, and any data handling procedures at unspecified times. Based on the audits and subsequent reports, the Department may recommend or require changes in the air monitoring network and associated activities in order to improve precision, accuracy, and data completeness.

APPENDIX G COMPLIANCE ASSURANCE MONITORING

Key elements of the monitoring approach for the CAM-affected Babcock and Wilcox Spreader Stoker Boiler at the TRP facility and the CAM-applicable pollutants from the affected emitting unit are contained in the Tables below. A complete CAM plan is contained in the Thompson River Power application for Title V Operating Permit #OP3175-01 and is on file with the Department. Complete copies of the CAM plan are available from the Department upon request.

I. Babcock & Wilcox Spreader Stoker Boiler: Flue Gas Desulfurization (FGD) Unit – Sulfur Dioxide (SO₂)

Emitting Unit: EU001 – Babcock & Wilcox Spreader Stoker Boiler

Pollutant: SO₂

Control Device: Post Combustion Flue Gas Desulfurization (FGD) Unit

Emission Limit: 0.220 pounds per million British thermal unit (lb/MMBtu) based on a rolling 30-day average (ARM 17.8.752) and 72.3 lb/hr based on a 1-hour average (ARM 17.8.749). See Section III.B.II of Title V Operating Permit #OP3175-03.

Monitoring Approach: Key elements of the monitoring approach for this CAM applicable emitting unit are contained in the Table below. A complete CAM plan is contained in the Thompson River Power application for Title V Operating Permit #OP3175-01 and is on file with the Department. Complete copies of the CAM plan are available from the Department upon request.

Table I: Babcock and Wilcox Spreader Stoker Boiler FGD Unit – SO₂	
General Criteria	
Indicator	Exhaust stream SO ₂ concentration and mass flow rate in parts per million (ppm), mass flow rate per hour (lb/hr) and mass flow rate per million British thermal unit heat input (lb/MMBtu)
Measurement Approach	A continuous emissions monitoring system (CEMS) on the boiler exhaust stream measures SO ₂ concentration and calculates mass flow rate of SO ₂ (lb/hr and lb/MMBtu). This information is used to assure proper FGD operation and monitor compliance with applicable limits/requirements.
Indicator Range	Indicator ranges need not be specified for CEMS that provide data in units of the applicable emissions standard because the level of the standard is the level at which an excess emission occurs. The use of CEMS that provide results in units of standard for the pollutant of interest and meet the criteria presented in 40 CFR 64.3(d)(2) are deemed presumptively acceptable for CAM purposes. The CEMS will measure SO ₂ emissions in ppm, lb/hr, and lb/MMBtu.
Performance Criteria	
Data Representativeness	This CAM plan uses direct SO ₂ measurement in lb/hr and lb/MMBtu, the same parameters and units used to monitor compliance with SO ₂ emission limits
Verification of Operational Status	CEMS data is monitored by control room operators and plant personnel and data is submitted to Department on periodic basis (semiannually)
Quality Assurance/ Quality Control	As required by 40 CFR 60 Subpart Db, Appendix B and Appendix F, operation of the SO ₂ CEMS is regulated by a daily calibration drift check of CEMS, a quarterly cylinder gas audit, and an annual RATA on system
Monitoring Frequency	Ongoing
Data Collection Procedures	CEMS automatically records exhaust stream SO ₂ concentrations in ppm, lb/hr, and lb/MMBtu. CEMS data is recorded using an electronic data acquisition system.
Averaging Period	1 hour

II. Babcock and Wilcox Spreader Stoker Boiler: Selective Non-Catalytic Reduction (SNCR), Over-Fire Air (OFA), and Flue Gas Recirculation (FGR) – Oxides of Nitrogen (NO_x)

Emitting Unit: EU001 – Babcock & Wilcox Spreader Stoker Boiler

Pollutant: NO_x

Control Device: Selective Non-Catalytic Reduction (SNCR), Flue-Gas Recirculation (FGR), and Over-Fire Air

Emission Limit: 0.196 lb/MMBtu based on a rolling 30-day average (ARM 17.8.752) and 47.24 lb/hr based on a 1-hour average (ARM 17.8.749). See Section III.B.II of Title V Operating Permit #OP3175-02.

Monitoring Approach: Key elements of the monitoring approach for this CAM applicable emitting unit are contained in the Table below. A complete CAM plan is contained in the Thompson River Power application for Title V Operating Permit #OP3175-01 and is on file with the Department. Complete copies of the CAM plan are available from the Department upon request.

Table II: Babcock and Wilcox Spreader Stoker Boiler Selective Non-Catalytic Reduction (SNCR), Over-Fire Air (OFA), and Flue Gas Recirculation (FGR) – NO_x	
General Criteria	
Indicator	Exhaust stream NO _x concentration and mass flow rate in parts per million (ppm), mass flow rate per hour (lb/hr), and mass flow rate per million British thermal unit heat input (lb/MMBtu)
Measurement Approach	A continuous emissions monitoring system (CEMS) on the boiler exhaust stream measures NO _x concentration and calculates mass flow rate of NO _x (lb/hr and lb/MMBtu). This information is used to assure proper combustion control (OFA and FGR) and SNCR operation and monitors compliance with applicable limits/requirements.
Indicator Range	Indicator ranges need not be specified for CEMS that provide data in units of the applicable emissions standard because the level of the standard is the level at which an excess emission occurs. The use of CEMS that provide results in units of standard for the pollutant of interest and meet the criteria presented in 40 CFR 64.3(d)(2) are deemed presumptively acceptable for CAM purposes. The CEMS will measure NO _x emissions in ppm, lb/hr, and lb/MMBtu.
Performance Criteria	
Data Representativeness	This CAM plan uses direct NO _x measurement in lb/hr and lb/MMBtu, the same parameters and units used to monitor compliance with NO _x emission limits
Verification of Operational Status	CEMS data is monitored by control room operators and plant personnel and data is submitted to Department on periodic basis (semiannually)
Quality Assurance/ Quality Control	As required by 40 CFR 60 Subpart Db, Appendix B and Appendix F, operation of the NO _x CEMS is regulated by a daily calibration drift check of CEMS, a quarterly cylinder gas audit, and an annual RATA on the system
Monitoring Frequency	Ongoing
Data Collection Procedures	CEMS automatically records exhaust stream NO _x concentrations in ppm, lb/hr, and lb/MMBtu. CEMS data is recorded using an electronic data acquisition system.
Averaging Period	1 hour

III. Babcock and Wilcox Spreader Stoker Boiler: Fabric Filter Baghouse – Particulate Matter with an Aerodynamic Diameter Less Than or Equal to 10 Microns (PM₁₀)

Emitting Unit: EU001 – Babcock & Wilcox Spreader Stoker Boiler

Pollutant: PM₁₀

Control Device: Fabric Filter Baghouse

Emission Limit: 0.017 grains per dry standard cubic feet (gr/dscf) based on a 1-hr average (ARM 17.8.752) and 5.90 lb/hr based on a 1-hour average (ARM 17.8.752). See Section III.B.II of Title V Operating Permit #OP3175-03.

Monitoring Approach: Key elements of the monitoring approach for this CAM applicable emitting unit are contained in the Table below. A complete CAM plan is contained in the Thompson River Power application for Title V Operating Permit #OP3175-01 and is on file with the Department. Complete copies of the CAM plan are available from the Department upon request.

Table III: Babcock and Wilcox Spreader Stoker Boiler Fabric Filter Baghouse – PM₁₀		
General Criteria	Indicator #1	Indicator #2
Indicator	Opacity/Visible Emissions	Baghouse Differential Pressure
Measurement Approach	Opacity is measured continuously with a Continuous Opacity Monitoring System (COMS). COMS measurements are recorded on an ongoing basis using an electronic data acquisition system.	Inlet and outlet of the baghouse is monitored using a differential pressure transducer. The signal from the pressure transducer is recorded using an electronic data acquisition system.
Indicator Range	The indicator level is an opacity reading equal to or exceeding 20%. An excursion will be defined as any COMS reading equal to or greater than 20% opacity.	The indicator range is a pressure drop between 2 and 10 inches of water, except during routine bag cleaning cycles where the pressure drop may fluctuate above or below the normal operations indicator range. An excursion is defined as a daily average differential pressure of below 2 or above 10 inches of water pressure.
QIP Threshold	The QIP threshold is excursions occurring greater than 5% of the operational time in any 6-month reporting period	The QIP threshold is excursions occurring greater than 5% of the operational time in any 6-month reporting period
Performance Criteria	Indicator #1	Indicator #2
Data Representativeness	The monitoring system consists of a COMS monitoring opacity of the exhaust gas stream on a continuous basis	Pressure drop across the baghouse is measured across the tube sheet. The minimum accuracy of the device is ± 1 inch water pressure
Verification of Operational Status	COMS digital read-out in boiler control room	Daily verification
Quality Assurance/ Quality Control	Calibrate, maintain, and operate COMS according to manufacturer's recommendations	The pressure transducer is calibrated in accordance with the Manufacturers' recommendations
Monitoring Frequency	Ongoing	The pressure drop is continuously monitored and recorded. Data is stored in the plant histories and is accessed by the data acquisition system
Data Collection Procedures	Opacity read and maintained electronically on a continuous basis using the data acquisition system	The data acquisition system measures pressure drop on a continuous basis
Averaging Period	6-consecutive minute average	24-hour

IV. Babcock and Wilcox Spreader Stoker Boiler: Fabric Filter Baghouse – Hydrochloric Acid Gas (HCl)

Emitting Unit: EU001 – Babcock & Wilcox Spreader Stoker Boiler
Pollutant: HCl

Control Device: Fabric Filter Baghouse and Flue Gas Desulfurization (FGD) Unit

Emission Limit: 0.01125 lb/MMBtu based on a 1-hour average (ARM 17.8.752), 2.17 lb/hr based on a 1-hour average (ARM 17.8.752), and 9.50 ton/yr based on an annual average (ARM 17.8.749). See Section III.B.II of Title V Operating Permit #OP3175-03.

Monitoring Approach: Key elements of the monitoring approach for this CAM applicable emitting unit are contained in the Table below. A complete CAM plan is contained in the Thompson River Power application for Title V Operating Permit #OP3175-01 and is on file with the Department. Complete copies of the CAM plan are available from the Department upon request.

Table IV: Babcock and Wilcox Spreader Stoker Boiler Fabric Filter Baghouse and Flue Gas Desulfurization (FGD) Unit – HCl			
General Criteria	Indicator #1	Indicator #2	Indicator #3
Indicator	Opacity/Visible Emissions	Baghouse Differential Pressure	FGD Performance Monitored Through Compliance with SO ₂ Limit(s) as a Surrogate
Measurement Approach	Opacity is measured continuously with a Continuous Opacity Monitoring System (COMS). COMS measurements are recorded on an ongoing basis using an electronic data acquisition system	Inlet and outlet of the baghouse is monitored using a differential pressure transducer. The signal from the pressure transducer is recorded using an electronic data acquisition system	A Continuous Emission Monitoring System (CEMS) on the boiler exhaust stream measures SO ₂ concentration and calculates mass flow rate of SO ₂ (lb/hr and lb/MMBtu). CEMS measurements are recorded on an ongoing basis using an electronic data acquisition system
Indicator Range	The indicator level is an opacity reading equal to or exceeding 20%. An excursion will be defined as any COMS reading equal to or greater than 20% opacity	The indicator range is a pressure drop between 2 and 10 inches of water, except during routine bag cleaning cycles where the pressure drop may fluctuate above or below the normal operations indicator range. An excursion is defined as a daily average differential pressure of below 2 or above 10 inches of water pressure.	Indicator ranges need not be specified for CEMS that provide data in units of the affected emissions standard (SO ₂) because the level of the standard is the level at which an excess emission occurs. The CEMS will measure SO ₂ emissions in ppm, lb/hr, and lb/MMBtu
QIP Threshold	The QIP threshold is excursions occurring greater than 5% of the operational time in any 6-month reporting period	The QIP threshold is excursions occurring greater than 5% of the operational time in any 6-month reporting period	The QIP threshold is excursions occurring greater than 5% of the operational time in any 6-month reporting period
Performance Criteria	Indicator #1	Indicator #2	Indicator #3
Data Representativeness	The monitoring system consists of a COMS monitoring opacity of the exhaust gas stream on a continuous basis	Pressure drop across the baghouse is measured across the tube sheet. The minimum accuracy of the device is ± 1 inch water pressure	This CAM plan uses direct SO ₂ measurement in lb/hr and lb/MMBtu, the same parameters and units used to monitor compliance with SO ₂ emission limits used to evaluate FGD performance

Verification of Operational Status	COMS data is monitored by control room operators and plant personnel and data is submitted to Department on periodic basis (semiannually)	Daily verification	CEMS data is monitored by control room operators and plant personnel and data is submitted to Department on periodic basis (semiannually)
Quality Assurance/ Quality Control	Calibrate, maintain, and operate COMS according to manufacturer's recommendations	The pressure transducer is calibrated in accordance with the Manufacturers' recommendations	As required by 40 CFR 60 Subpart Db, Appendix B and Appendix F, operation of the SO ₂ CEMS is regulated by a daily calibration drift check of CEMS, a quarterly cylinder gas audit, and an annual RATA on system
Monitoring Frequency	Ongoing	The pressure drop is continuously monitored and recorded. Data is stored in the plant histories and is accessed by the data acquisition system	Ongoing
Data Collection Procedures	Opacity read and maintained electronically on a continuous basis using the data acquisition system	The data acquisition system measures pressure drop on a continuous basis	Exhaust stream SO ₂ concentrations are recorded electronically in ppm, lb/hr, and lb/MMBtu using the data acquisition system
Averaging Period	6-consecutive minute average	24-hour	1-hour

APPENDIX H BEST MANAGEMENT OPERATING PROCEDURES FOR STARTUP AND SHUTDOWN

TRP's *Best Management Operating Procedures for Startup and Shutdown* dated July 29, 2008 is on file with the Department, but are summarized below. The full document is available for review at the Department's offices in Helena and Missoula, and the Missoula City-County Health Department.

Introduction

The requirements contained in the MAQP shall apply during Babcock and Wilcox spreader stoker boiler (boiler) startup and shutdown operational events. TRP shall operate the facility in accordance with the *Best Management Operational Practices for Startup and Shutdown Events* submitted to the Department on July 29, 2008 under MAQP #3175-06. In the event that the Best Management Operational Practices Startup and Shutdown Events on file with the Department are modified significantly to the extent that would result in a change in boiler emissions, best management practices outlined the BACT analysis, or emissions limits, TRP shall submit these modifications to the Department for inclusion in Department record and shall submit a permit modification, when applicable. The following summarizes the startup and shutdown operations that shall be conducted. The entire startup and shutdown procedure is on file with the Department.

Although the steps for performing a boiler startup or shutdown event are generally the same, the amount of effort, inspection level, and duration of the event may vary significantly for each event. The most important factors governing the startup or shutdown procedures include, but are not limited to: boiler temperature, chemistry of the water in the boiler drum, condition of the coal bed, condition of the coal burning grates, condition of the steam-driven turbine, and condition of auxiliary systems, such as pumps and electrical gear. All of these factors can significantly influence the duration and exact actions taken during a startup or shutdown event. The following startup and shutdown procedures generally describe typical operational procedures used by TRP during a boiler startup or shutdown event.

Startup Procedures

A startup event takes the facility from a non-operational condition to a steady-state electrical load condition. During the startup process, the facility goes through a number of steps to go from a cold start or a warm re-start until the system is brought up to a steady-state load. During this process, oxides of nitrogen (NO_x) and sulfur dioxide (SO₂) emissions will vary until conditions for the safe and effective operation of the applicable NO_x and/or SO₂ air pollution control equipment are reached. Particulate emissions are captured by the baghouse at all times of operation, including periods of startup.

Cold-Start Conditions

A cold-start event occurs when there is no fuel feed to the boiler and the low temperature of the boiler requires the initial use of the propane/diesel-fired startup burner to bring the pressure of the boiler up to 50 PSIG.

Step 1. Perform all pre-startup inspections.

Step 2. Establish a uniform coal bed on the boiler grate. This protects the boiler grate from radiant heat damage from the startup burner and assures proper lighting and combustion of the coal pile.

Step 3. Start the induced draft (ID) fan, and balance the airflow.

Step 4. Start the startup burner and follow the B&W recommended warm-up curve until the steam drum pressure reaches 50 psig. The startup commences upon ignition of the startup burner (Estimated time for Step 4: 8-12 hours).

Step 5. Turn off the startup burner, and secure it against operation during periods of coal/wood fuel feed. Turn off the ID fan. Ignite the coal with a hand-held propane torch, close the access doors, restart the ID fan, and start Flue Gas Recirculation (FGR) Fan-01 (Estimated time for Step 5: 2 - 3 hours).

Step 6. Once the coal fire is well established, start the coal feeder, the forced-draft (FD) fan, the fly-ash reinjection fan, and the over-fire air (OFA) fan. The control system automatically ramps up the fuel feed rate to maintain boiler pressure. FGD system operation is initiated when the temperature at the inlet of the scrubber is 250°F and the temperature of the baghouse inlet is 195°F. Urea injection operation is initiated when the fire box (15 ft. above grate) temperature is approximately 1512°F. (Note: these temperatures to be confirmed during plant commissioning.) The plant startup is complete when both the FGD and urea injection systems are operational, and the lbs/MMbtu emission limits in the Montana Air Quality Permit have been met for at least 15 minutes (Estimated time for Step 6: 4 – 8 hours).

Total elapsed time from cold start to full load typically varies between 12 and 48 hours.

Warm-Start Conditions

A warm-start occurs when the boiler temperature is elevated and the boiler drum pressure is above 15 psig, but there is no fuel feed to or electrical output from the boiler. A warm-start uses the same procedure as described in the cold-start procedure discussed above except the procedure is initiated at Step 4, depending on the condition of the boiler and turbine at time of re-start.

Shutdowns

A shutdown event takes the boiler from a steady-state electrical load condition to a non-operational condition or from a mid startup condition to a non-operating condition. During this process, NOx and SO2 emissions are controlled by the applicable emission control systems until the boiler operating parameters can no longer support the operation of the respective controls, as discussed in the startup procedures. Particulate emissions are captured by the baghouse at all times of operation, including periods of shutdown.

Step 1. Decrease the fuel feed and combustion air flow rates. As the rate of fuel feed is reduced, the steam production rate decreases. Close the manual slide gate on the outlet of the Boiler Coal Silo. Continue to burn clear of the Weigh Scale Conveyor. Stop the Coal Weigh Scale Conveyor and Weighing Hopper batch cycle. Shut down the coal feeder when the coal feed chute is empty and feeders are clear of coal. When the flue gas inlet temperature to the FGD drops to 195°F, remove the FGD and urea injection systems from service. Shut down the stoker grate operation when the stoker is clear and all ash and coal has run out. The shutdown commences at the start of the first 15-minute period when the lbs/MMbtu emission limits have been exceeded after initiation of the shutdown procedure. The shutdown ends when the stoker grate has been shut down.

(Estimated time for shutdown: 4 - 8 hours)

APPENDIX I BEST MANAGEMENT OPERATING PROCEDURES FOR ASH-PULLING PERIODS

TRP's *Best Management Operating Procedures for Ash-pulling Periods* dated July 29, 2008 are on file with the Department, but are summarized below. The full document is available for review at the Department's offices in Helena and Missoula, and the Missoula City-County Health Department.

The requirements contained in the MAQP shall apply during Babcock and Wilcox spreader stoker boiler (boiler) ash-pulling periods/events. TRP shall operate the facility in accordance with the *Best Management Operating Procedures for Ash-Pulling Periods* submitted to the Department on July 29, 2008 for MAQP#3175-06. In the event that the *Best Management Operating Procedures for Ash-Pulling Periods* on file with the Department are modified significantly to the extent that would result in a change in boiler emissions, best management practices outlined the BACT analysis, or emissions limits, TRP shall submit these modifications to the Department for inclusion in Department record and shall submit a permit modification, when applicable. The following summarizes the ash-pulling procedures that shall be conducted. However, the entire ash-pulling procedure is on file with the Department.

Best Management Operating Procedures for Ash-Pulling Periods shall be followed during ash-pulling periods to decrease the duration of the events and limit the amount of non-design air into the boiler. There are two bottom ash hoppers with associated clinker grinders located in the basement of the boiler building that collect ash. While the boiler is operating, the TRP operator is required to empty each of the bottom ash hoppers approximately every 12 hours.

Summary of Ash-Pulling Procedures

- Step 1. Perform all pre-ash pulling inspections.
- Step 2. With the slide gate in the closed position, open the clinker grinder inspection door and verify that both clinker grinders are free of debris. Once clear, close the clinker grinder inspection door.
- Step 3. Establish a vacuum through ash collection system. Once a stable vacuum is achieved, start the No. 1 clinker grinder drive.
- Step 4. From the bottom ash hopper inspection ports visually inspect the bottom ash level prior to dumping each bottom ash hopper. Do not open the clinker grinder inspection door while the bottom ash slide gate is in the open position. Proceed with dumping bottom ash. When required, rod the debris clear to allow continued flow to the grinder.
- Step 5. Start the No. 2 clinker grinder drive.
- Step 6. Begin dumping cycle for No. 1 and No. 2 Bottom Ash Hoppers

Estimated time for one ash-pulling cycle: 30-60 minutes.