

AIR QUALITY DIVISION
CHAPTER 6, SECTION 3
OPERATING PERMIT

WYOMING DEPARTMENT OF
ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
122 West 25th Street
Cheyenne, Wyoming 82002



PERMIT NO. 3-2-101-1

Issue Date: **September 5, 2013**
Expiration Date: **February 18, 2014**
Effective Date: **September 5, 2013**
Replaces Permit No.: **3-2-101**

In accordance with the provisions of W.S. §35-11-203 through W.S. §35-11-212 and Chapter 6, Section 3 of the Wyoming Air Quality Standards and Regulations,

PacifiCorp Energy
Wyodak Plant
Section 27, Township 50 North, Range 71 West
Campbell County, Wyoming

is authorized to operate a stationary source of air contaminants consisting of emission units described in this permit. The units described are subject to the terms and conditions specified in this permit. All terms and conditions of the permit are enforceable by the State of Wyoming. All terms and conditions of the permit, except those designated as not federally enforceable, are enforceable by EPA and citizens under the Act. A copy of this permit shall be kept on-site at the above named facility.

Steven A. Dietrich

Steven A. Dietrich, Administrator
Air Quality Division

9-5-13

Date

Todd Parfitt

Todd Parfitt, Director
Department of Environmental Quality

9/18/13

Date

WAQSR CHAPTER 6, SECTION 3 OPERATING PERMIT

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

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SOURCE EMISSION POINTS

(Modified September 5, 2013)

This table may not include any or all insignificant activities at this facility.

SOURCE ID#	SOURCE DESCRIPTION	SIZE	CH. 6, SEC. 2 PERMITS
1	Electric Utility Steam Generating Unit (NADB #BW91) Dry Bottom Wall Fired ¹	4,100 MMBtu/hr	Waiver AP-3436, MD-7487, MD-10472, MD-6043A
2	T-1 Transfer House (emergency coal handling back up system)	1,800 TPH (3,870 scfm)	January 19, 1996 Waiver
3	T-2 Transfer House	2,000 TPH (3,010 scfm)	None
4	Silo Methane Purge Exhauster	2,000 TPH (14,618 scfm)	None
5	Dust Extractor Unit	1,000 TPH	MD-1177
9	Fly Ash Silo (fugitive emissions from truck loading)	112,387 TPY ²	None
10	Fly Ash Haul Road	112,387 TPY ²	None
11	Peerless Pit Secondary Crusher	2,000 TPH (30,472 scfm)	October 5, 1997 Waiver
FUG01	Passive Enclosure Dust Control System (PECS)	1,000 TPH	MD-1079
Eng-1	Emergency Diesel Generator Engine	725 hp	None
Eng-2	Emergency Diesel Fire Pump Engine	190 hp	None
Eng-3	Standby Diesel Fire Pump Engine	285 hp	None
H-1	Propane-Fired Space Heater (coal handling)	2.5 MMBtu/hr	None
H-2	Propane-Fired Space Heater (east main coal silo)	2.5 MMBtu/hr	None
H-3	Propane-Fired Space Heater (spare space heater)	1.2 MMBtu/hr	None
H-4	Propane-Fired Space Heater (boiler building east)	2.5 MMBtu/hr	None
H-5	Propane-Fired Space Heater (boiler building west)	2.5 MMBtu/hr	None
H-6	Propane-Fired Space Heater (turbine building)	2.5 MMBtu/hr	None
H-7	Propane-Fired Space Heater (water treatment building)	2.3 MMBtu/hr	None
H-8	Propane-Fired Space Heater (old maintenance shop)	1.8 MMBtu/hr	None

¹ Particulate matter emissions controlled by a **baghouse**, SO₂ emissions controlled by a dry scrubber, and NO_x emissions controlled by low NO_x burners **with air over-fire**.

² These are descriptive numbers and not permit limitations.

TOTAL FACILITY ESTIMATED EMISSIONS

(Modified September 5, 2013)

For informational purposes only. These emissions are not to be assumed as permit limits.

POLLUTANT	EMISSIONS (TPY)
CRITERIA POLLUTANT EMISSIONS	
Particulate Matter	338.8
PM ₁₀ Particulate Matter	337.2
Sulfur Dioxide (SO ₂)	3,293.8
Nitrogen Oxides (NO _x)	4,738.6
Carbon Monoxide (CO)	5,147.1
Volatile Organic Compounds (VOCs)	78.0
HAZARDOUS AIR POLLUTANT (HAP) EMISSIONS	19.7*

SO₂ and NO_x emission estimates are based on PAL limits. VOCs and HAP emissions are from AP-42 factors. Other emission estimates are from the operating permit application

* The highest single HAP is Cyanide at 8.5 TPY

FACILITY-SPECIFIC PERMIT CONDITIONS

Facility-Wide Permit Conditions

- (F1) **PERMIT SHIELD** [WAQSR Ch 6, Sec 3(k)]
Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance.
- (F2) **ACID RAIN** [WAQSR Ch 6, Sec 3(h)(i)(A)(II)] [W.S. 35-11-212(a)]
Where an applicable requirement of this operating permit is more stringent than an applicable requirement of the Acid Rain portion of this permit, both shall apply to the permittee and are enforceable by EPA and the Division.
- (F3) **TITLE IV ALLOWANCES** [WAQSR Ch 6, Sec 3(h)(i)(D)] [W.S. 35-11-212(a)]
Emissions from this facility shall not exceed any allowances that the permittee lawfully holds under title IV of the Clean Air Act or the regulations promulgated thereunder.
- (F4) **SULFUR DIOXIDE EMISSIONS INVENTORY AND SULFUR DIOXIDE MILESTONE & BACKSTOP TRADING PROGRAM** [WAQSR Ch 14, Sec 2 and 3; Ch 6, Sec 2 Permit MD-6043A] **(Modified September 5, 2013)**
- (a) The permittee shall report SO₂ emissions annually as required by WAQSR Ch 14, Sec 3. SO₂ emissions shall be estimated in accordance with Ch 14 Sec 3(b), and adjusted in accordance with Ch 14 Sec 3(c) if necessary.
 - (b) **The permittee shall comply with all applicable requirements of the Regional SO₂ Milestone and Backstop Trading Program in accordance with WAQSR Ch 14, Sec 2 and 3.**

Source-Specific Permit Conditions

- (F5) **VISIBLE EMISSIONS** [WAQSR Ch 3, Sec 2; 40 CFR 60 Subpart Y; Ch 6, Sec 2 Permits MD-1079, MD-1177, & MD-7487] **(Modified September 5, 2013)**
- (a) Unless a different limit is specified elsewhere in this permit, visible emissions of any contaminant discharged into the atmosphere from any single emission source shall not exhibit greater than 20 percent opacity except for one period or periods aggregating not more than six minutes in anyone hour of not more than 40 percent opacity.
 - (b) Visible emissions discharged into the atmosphere from the Peerless pit secondary crusher (source 11) shall not exhibit 20 percent opacity or greater.
 - (c) Visible emissions from the emergency diesel generator, emergency diesel fire pump, and the standby diesel fire pump engines shall not exhibit greater than 30 percent opacity except for periods not exceeding ten consecutive seconds. This limitation shall not apply during a reasonable period of warmup following a cold start or where undergoing repairs and adjustment following a malfunction.
 - (d) The passive enclosure dust control system (PECS, source FUG01) and dust extractor unit (source 5) shall be operated and maintained so that the systems exhibit no visible emissions in accordance with 40 CFR 60, Appendix A, Method 22.
 - (e) **Visible emissions from the boiler (source 1) shall not exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity. This limit applies during all operating periods.**
- (F6) **BOILER STACK EMISSIONS** [40 CFR 60 Subpart D; W.S. 35-11-110 and Division letter March 21, 1990; WAQSR Ch 6, Sec 2 Waiver AP-3436, Permits MD-7487, MD-6043A, & MD-10472] **(Modified September 5, 2013)**
- (a) Emissions from the boiler (source 1) shall not exceed the limits specified in Table I.
 - (b) The permittee may incinerate waste oil in the boiler for energy recovery purposes. Only plant generated used oil, grease, and diesel sorbent materials shall be burned in the boiler.
 - (i) The used oil shall meet specifications in the Wyoming Hazardous Waste Rules and Regulations, Ch 12, Sec 10(b), Used Oil Specifications, attached as Appendix A.
 - (ii) The permittee shall follow the applicable requirements of 40 CFR 266.108, also attached as Appendix A.

Source ID #	NO _x ^(a)	SO ₂ ^(a)	Particulate ^(b)	Particulate ^(a)	CO ^(a)
1	0.23 lb/MMBtu 30-day rolling average	0.16 lb/MMBtu, 30-day rolling average and;	0.015 lb/MMBtu, filterable PM/PM ₁₀	71.0 lb/hr, 308.8 TPY filterable PM/PM ₁₀	0.25 lb/MMBtu and 1,175.0 lb/hr, 30-day rolling average
	0.7 lb/MMBtu 3-hr block average	0.5 lb/MMBtu, 3-hr block average and;			
	1,081.0 lb/hr 30-day rolling average	2,115.0 lb/hr, 3-hr block average			
	4,735 TPY				

^(a) Limits shall apply during all operating periods.

^(b) Limits shall apply during all operating periods, except startup. Startup begins with the introduction of fuel oil into the boiler and ends no later than the point in time when the flue gas desulfurization system on the boiler reaches a temperature of 275 °F and three coal pulverizers have been placed in service.

(F7) BAGHOUSE PARTICULATE EMISSIONS [WAQSR Ch 6, Sec 3(h)(i)(A); W.S. 35-11-110 & October 31, 1997 permittee letter; Ch 6, Sec 2 October 5, 1997 Waiver] (Modified September 5, 2013)

Emissions of particulate matter from each baghouse shall not exceed the limits specified in Table II.

Source ID Number	Source Description	Emission Limit (grains/dscf)	Emission Limit (lb/hr)	Emission Limit (tpy)
2	T-1 Transfer House	0.02	0.7	2.9
3	T-2 Transfer House	0.02	0.5	2.3
4	Silo Methane Purge Exhauster	0.02	2.5	11.0
11	Peerless Pit Secondary Crusher	0.01	2.6	11.4

(F8) OPERATION AND MAINTENANCE [WAQSR Ch 6, Sec 3(h)(i)(A); Ch 6, Sec 2 Permit MD-1177]

(a) The permittee shall conduct preventative maintenance and inspections on the emergency diesel generator engine, the emergency diesel fire pump engine, and the standby diesel fire pump engine in accordance with the Operation and Maintenance Plan, attached as Appendix B.

(b) The permittee shall conduct preventative maintenance and inspections on the dust extractor unit (source 5), in accordance with the Preventative Maintenance Plan, attached as Appendix C.

(F9) FUEL BURNING EQUIPMENT [WAQSR Ch 3, Sec 3]

NO_x emissions from the propane-fired space heaters shall not exceed 0.20 lb/MMBtu heat input.

Testing Requirements

(F10) BOILER EMISSIONS TESTING

[W.S. 35-11-110] (Modified September 5, 2013)

(a) The permittee shall measure particulate emissions from the boiler (source 1) at least annually for comparison with the emission limits specified in condition F6. Testing shall be conducted as specified in condition F11(a).

(b) Testing shall be conducted using the methods specified in condition F11(a) and in accordance with WAQSR Ch 5, Sec 2(h).

- (F11) **ADDITIONAL EMISSIONS TESTING [W.S. 35-11-110] (Modified September 5, 2013)**
- (a) The Division reserves the right to require additional testing as provided under condition G1 of this permit. Should testing be required, test methods found at 40 CFR 60, Appendix A, shall be used as follows:
 - (i) For visible emissions from the PECS (source FUG01) and dust extractor unit (source 5), Method 22 shall be used.
 - (ii) For visible emissions from all other sources, Method 9 shall be used.
 - (iii) For particulate emissions, Methods 1-4 and 5 shall be used.
 - (iv) For SO₂ emissions, Methods 1-4 and 6 or 6C shall be used.
 - (v) For NO_x emissions, Methods 1-4 and 7 or 7E shall be used.
 - (vi) **For CO emissions, Methods 1-4 and 10 shall be used.**
 - (vii) For the boiler (source 1) SO₂, NO_x, and visible emissions shall be measured as specified in 40 CFR 60, Subpart D, §60.46(b).
 - (viii) For alternative test methods, or methods used for other pollutants, the approval of the Administrator must be obtained prior to using the test method to measure emissions.
 - (b) Unless otherwise specified, testing shall be conducted in accordance with WAQSR Ch 5, Sec 2(h).

Monitoring Requirements

- (F12) **VISIBLE EMISSIONS MONITORING [WAQSR Ch 6, Sec 3(h)(i)(C)(I) and Ch 6, Sec 3 Permits MD-1079 & MD-1177] (Modified September 5, 2013)**
- (a) The permittee shall conduct observations of visible emissions from the emergency diesel generator engine, emergency diesel fire pump engine, and standby diesel fire pump engine during the periodic availability assurance tests of these sources to assess compliance with the opacity limit in condition F5 and to identify maintenance needs. The presence of any visible emissions shall trigger a Method 9 observation to determine compliance with condition F5.
 - (b) The permittee shall conduct, at minimum, daily visual observations of the PECS (source FUG01) and dust extractor unit (source 5) to determine the presence of visible emissions.
 - (i) The visual observations shall be conducted by a person who is educated on the general procedures for determining the presence of visible emissions, but not necessarily certified to perform Method 9 observations.
 - (ii) Observation of any visible emissions shall prompt immediate inspection and corrective actions.
 - (c) Periodic monitoring for visible emissions from the propane-fired space heaters shall consist of monitoring the type of fuel used to ensure propane is the sole fuel source for these units.
 - (d) **The permittee shall calibrate, maintain, and operate a continuous monitoring system for measuring the opacity of emissions from the boiler (source 1) as specified in §60.45.**
- (F13) **BOILER MONITORING [WAQSR Ch 6, Sec 3(h)(i)(C)(I); Ch 7, Sec 3(c)(ii); Ch 6, Sec 2 Waiver AP-3436 & Permit MD-10472] (Modified September 5, 2013)**
- (a) For particulate emissions from the boiler baghouse (source 1), the permittee shall adhere to the compliance assurance monitoring (CAM) plan, attached as Appendix D, and shall conduct monitoring as follows:
 - (i) The permittee shall monitor, on a continuous basis, the opacity of emissions from the boiler stack.
 - (ii) Operation outside of the ranges established in the approved CAM plan shall trigger immediate corrective action.
 - (iii) The permittee shall perform testing for particulate emissions, as required by condition F10, for comparison with the emission limits specified in condition F6, and to verify the correlation between opacity and particulate emissions. The permittee shall measure the CAM indicators during the tests. Following each annual test, the permittee shall evaluate the data from the test, together with data from previous testing, to determine if the indicator ranges in the CAM plan should be revised.
 - (iv) The permittee shall follow all other applicable requirements under conditions CAM-1 through CAM-4 of this permit.
 - (b) **For NO_x and SO₂ emissions, the data from the NO_x and SO₂ continuous emissions monitoring systems required by 40 CFR 75 shall be used to determine compliance with the emission limits specified in condition F6.**

- (c) The permittee shall calibrate, operate, and maintain a continuous emissions monitoring (CEM) system to assess compliance with the CO limits specified in condition F6.
 - (i) The CEM shall measure CO emissions discharged to the atmosphere in units of lb/MMBtu and lb/hr. The CO monitoring system shall consist of the following:
 - (A) A continuous emission CO monitor located in the stack of the boiler (source 1).
 - (B) A continuous flow monitoring system for measuring the flow of exhaust gases discharged into the atmosphere.
 - (C) An in-stack oxygen or carbon dioxide monitor for measuring oxygen or carbon dioxide content of the flue gas at the location CO emissions are monitored.
 - (ii) The monitoring systems shall comply with WAQSR Ch 5, Sec 2(j), including the following:
 - (A) 40 CFR 60, Appendix B, Performance Specification 4 or 4a for carbon monoxide. The monitoring system must demonstrate linearity using 40 CFR 60, Appendix F, and be certified in both concentration (ppm_v) and units of the standard (lb/MMBtu and lb/hr).
 - (B) The quality assurance requirements of 40 CFR 60, Appendix F.
 - (C) The permittee shall follow the most recent Division-approved Quality Assurance plan for the CO monitoring system.
- (d) The permittee shall monitor the time, date and amount of used oil, grease, and diesel sorbent burned in the boiler.
- (e) The permittee shall monitor boiler (source 1) startups and shutdowns for the parameters required to be recorded by the Wyodak Plant Startup and Shutdown Definitions attached as Appendix E.

(F14) BAGHOUSE CONTROLLED EQUIPMENT EMISSIONS MONITORING

[WAQSR Ch 6, Sec 3(h)(i)(C)(I); Ch 7, Sec 3(c)(ii)]

For particulate emissions from baghouse controlled equipment (sources 2, 3, 4, and 11), the permittee shall adhere to the compliance assurance monitoring (CAM) plans, attached as Appendix D, and shall conduct monitoring as follows:

- (a) The permittee shall conduct, at minimum once daily, visual observations of each baghouse controlled unit to determine the presence of visible emissions. Observations are not required on days a unit is not operated. The permittee shall record days a unit is not operated.
- (b) The visual observations shall be conducted by a person who is educated on the procedures for determining the presence of visible emissions to perform Method 22 observations.
- (c) Observation of any visible emissions from any of these units shall prompt immediate inspection and, if necessary, corrective actions and reporting.
- (d) The permittee shall follow all other applicable requirements under conditions CAM-1 through CAM-4 of this permit.

(F15) PROPANE-FIRED SPACE HEATER EMISSIONS MONITORING [WAQSR Ch 6, Sec 3(h)(i)(C)(I)]

Based on the size of NO_x emissions from the propane-fired space heaters and their potential impact on ambient standards, the Division is satisfied that no additional monitoring is required.

Recordkeeping Requirements

(F16) SULFUR DIOXIDE EMISSIONS INVENTORY RECORDS [WAQSR Ch 14, Sec 3(b)]

- (a) The permittee shall maintain all records used in the calculation of SO₂ emissions for the inventory required by condition F4, including but not limited to the following:
 - (i) Amount of fuel consumed;
 - (ii) Percent sulfur content of fuel and how the content was determined;
 - (iii) Quantity of product produced;
 - (iv) Emissions monitoring data;
 - (v) Operating data; and
 - (vi) How the emissions are calculated, including monitoring/estimation methodology with a demonstration that the selected methodology is acceptable under Ch 14, Sec 3.
- (b) The permittee shall maintain records of any physical changes to facility operations or equipment, or any other changes (e.g. raw material or feed) that may affect emissions projections of SO₂.

- (c) The permittee shall retain all records and support information for compliance with this condition and with the reporting requirements of condition F20 at the facility, for a period of **at least ten (10) years** from the date of establishment, or if the record was the basis for an adjustment to the milestone, five years after the date of an implementation plan revision, whichever is longer.
- (F17) **TESTING AND MONITORING RECORDS [WAQSR Ch 6, Sec 3(h)(i)(C)(II); Ch5, Sec 2(g); Ch 6, Sec 2 Permits MD-6043A, MD-7487 & MD-10472; 40 CFR 60 Subpart D; 40 CFR 75 Subpart F] (Modified September 5, 2013)**
- (a) For any testing required under conditions F10 and F11, other than Method 9 or Method 22 observations, and the monitoring required under conditions F12(a) and (b), F13 and F14, the permittee shall record, as applicable, the following:
- (i) The date, place, and time of sampling, measurements, or observations;
 - (ii) The date(s) any analyses or observations were performed;
 - (iii) The company or entity and individual(s) that performed the analyses or observations;
 - (iv) The analytical techniques or methods used;
 - (v) The results of such analyses or observations; and
 - (vi) The operating conditions as they existed at the time of sampling, measurement or observations.
 - (vii) For the particulate emissions testing required by condition F10, the opacity as measured during particulate sampling, **and the CAM indicator evaluation required by condition F13(a)(iii).**
 - (viii) The permittee shall maintain records of any corrective actions taken.
- (b) For any Method 9 observations required by the Division under condition F11, the permittee shall keep field records in accordance with Section 2.2 of Method 9.
- (c) For the Method 22 observations required by the Division under condition F11, the permittee shall keep field records in accordance with Sections 11.2 and 11.5 of Method 22.
- (d) The permittee shall record the time, date and amount of waste oil burned in the boiler.
- (e) The permittee shall maintain sufficient records documenting compliance with the hazardous waste quantity, firing rate, and heating value limitations of 40 CFR 266.108. At minimum, these records must indicate the quantity of hazardous waste and other fuel burned in the unit per calendar month, and the heating value of the hazardous waste.
- (f) **The permittee shall maintain records documenting the amount of coal burned each calendar year at the facility.**
- (g) **For the boiler (source 1), the permittee shall meet the recordkeeping requirements for continuous monitoring of opacity, SO₂, CO, and NO_x as specified in WAQSR Ch 5, Sec 2(g), 40 CFR 60, Subparts A and D, plus 40 CFR 75, Subpart F, as applicable, and record the output in units of each standard as listed in Table I in condition F6. Records shall include the data, calculations, and assumptions used to take the CEMs data output and compare it to the emission limits as described in condition F24(b).**
- (h) **The permittee shall maintain records of the boiler (source 1) starts and shutdowns as specified in the Startup and Shutdown Definitions in Appendix E for condition F13(e).**
- (i) The permittee shall retain on-site at the facility, the records of each test, measurement, or observation and support information for a period of at least five years from the date of the test, measurement, or observation.
- (F18) **ADDITIONAL CAM RECORDS [WAQSR Ch 6, Sec 3(h)(i)(C)(II) & Ch 7, Sec 3(i)(ii)]**
- (a) For the CAM required under conditions F13 and F14, the permittee shall also maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to WAQSR Chapter 7, Section 3(h), any activities undertaken to implement a Quality Improvement Plan (QIP), and other supporting information required to be maintained under WAQSR Chapter 7, Section 3.
- (b) The permittee shall retain on-site at the facility, the records of each test, measurement, or observation and support information for a period of at least five years from the date of the test, measurement, or observation.

(F19) MAINTENANCE RECORDS [WAQSR Ch 6, Sec 3(h)(i)(C)(II)]

- (a) The permittee shall record all maintenance and inspection activities performed on:
 - (i) The emergency diesel generator engine, emergency diesel fire pump engine, and the standby diesel fire pump engine in accordance with the Operation and Maintenance Plan, attached as Appendix B.
 - (ii) The dust extractor unit (source 5), in accordance with the Preventative Maintenance Plan, attached as Appendix C.
- (b) The record of maintenance activities for each unit shall include:
 - (i) The maintenance activity performed;
 - (ii) The date and place of the activity performed;
 - (iii) The company and individual(s) that performed the activity;
 - (iv) The purpose of the activity; and
 - (v) An explanation for any deviation from the Operation and Maintenance Plan, attached as Appendix B, or the Preventative Maintenance Plan, attached as Appendix C.
- (c) The permittee shall retain on-site at the facility, the records of each maintenance activity for each unit for a period of at least five years from the date of the maintenance activity.

Reporting Requirements

(F20) SULFUR DIOXIDE EMISSIONS INVENTORY REPORTS [WAQSR Ch 14, Sec 3(b) and (c)]

- (a) The permittee shall report calendar year SO₂ emissions by April 15th of the following year. The inventory shall be submitted in the format specified by the Division.
- (b) Emissions from startup, shutdown, and upset conditions shall be included in the inventory.
- (c) If the permittee uses a different emission monitoring or calculation method than was used to report SO₂ emissions in 1998, the permittee shall adjust reported SO₂ emissions to be comparable to the emission monitoring or calculation method that was used in 1998. The calculations that are used to make this adjustment shall be included with the annual emission report.
- (d) For acid rain sources, the permittee shall submit a summary report of annual SO₂ emissions that were reported to the EPA under 40 CFR Part 75.
- (e) The permittee shall use 40 CFR Part 75 methodology for reporting emissions for all sources subject to the federal acid rain program.
- (f) If 40 CFR Part 60, Appendix A, Test Methods 2F, 2G, or 2H are used to measure stack flow rate, the permittee shall adjust reported SO₂ emissions to ensure they are comparable to 1999 emissions. The adjustment may be calculated using the methods in Ch 14 Sec 3(c)(i)(A) through (C). The calculations that are used to make this adjustment shall be included with the annual emission report.
- (g) The annual reports shall be submitted in accordance with condition G4 of this permit.

(F21) TEST REPORTS [WAQSR Ch 6, Sec 3(h)(i)(C)(III)]

- (a) The permittee shall report the results of the emissions tests required under condition F10, and any additional testing required by the Division under condition F11, within 45 days of conducting the tests.
- (b) The reports shall include the information specified under condition F17 and shall be submitted to the Division in accordance with condition G4.

(F22) MONITORING REPORTS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III) and Ch 6, Sec 2 Permits MD-593]
(Modified September 5, 2013)

- (a) The following shall be reported to the Division by January 31 and July 31 each year:
 - (i) Documentation that all propane-fired space heaters are firing propane as specified in condition F12.
 - (ii) Summary results of the emissions monitoring required under conditions F12(a) and (b), F13(a), and F14.
 - (iii) Additionally, the results of Compliance Assurance Monitoring (CAM) required under conditions F13 and F14 for the baghouse controlled equipment shall include the following:
 - (A) Summary information on the number, duration, and cause of excursions, as applicable, and the corrective actions taken;

- (B) Summary information on the number, duration, and cause for monitor downtime incidents (if applicable); and
 - (C) A description of the action taken to implement a QIP (if required) during the reporting period as specified in Chapter 7, Section 3(h). Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has reduced the likelihood of similar excursions.
- (b) All instances of deviations from the conditions of this permit must be clearly identified in each report.
 - (c) The semiannual and annual reports shall be submitted in accordance with condition G4 of this permit.
- (F23) MAINTENANCE REPORTS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)]
- (a) The permittee shall report to the Division by January 31 and July 31 each year,
 - (i) Whether the permittee has adhered to the Operation and Maintenance Plan and Preventative Maintenance Plan as specified under condition F8 for the emergency diesel generator engine, the emergency diesel fire pump engine, the standby diesel fire pump engine, and the dust extractor unit.
 - (ii) Any deviations from the Operation and Maintenance Plan, or Preventative Maintenance Plan must be clearly identified in each report.
 - (iii) If the permittee has adhered to the Operations and Maintenance Plan and Preventative Maintenance Plan during the reporting period, this shall be stated in the report.
 - (b) The semiannual reports shall be submitted in accordance with condition G4 of this permit
- (F24) BOILERS EXCESS EMISSIONS & MONITORING SYSTEM PERFORMANCE REPORTS
[WAQSR Ch 5, Sec 2(g); Ch 6, Sec 3(h)(i)(C)(III) and Ch 6, Sec 2 Permit MD-10472]
(Modified September 5, 2013)
- (a) For the boiler (source 1), the permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in paragraph (b) of this condition) and/or a summary report form (see paragraph (a)(v) of this condition) to the Administrator quarterly. All reports shall be postmarked by the 30th day following the end of each calendar quarter. Written reports of excess emissions shall include the following information:
 - (i) The magnitude of excess emissions computed in accordance with WAQSR Chapter 5, Section 2(j)(viii), any conversion factor(s) used, the date and time of commencement and completion of each time period of excess emissions, and the process operating time during the reporting period.
 - (ii) Specific identification of each period of excess emissions that occurs during start ups, shutdowns or malfunctions of the boiler, the nature and cause of any malfunction (if known), and the corrective action taken or preventative measures adopted.
 - (iii) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - (iv) When no excess emissions have occurred or the continuous monitoring system(s) has been inoperative, repaired, or adjusted, such information shall be stated in the report.
 - (v) One summary report form for each pollutant monitored at each affected facility in a format approved by the Division.
 - (A) If the total duration of excess emissions for the reporting period is less than one percent of the total operating time for the reporting period and continuous monitoring system downtime for the reporting period is less than five percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in paragraph (a) of this condition need not be submitted unless requested by the Administrator.
 - (B) If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total continuous monitoring system downtime for the reporting period is five percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in paragraph (a) of this condition shall both be submitted.

(b) Exceedances of the limits shall be defined as follows:

(i) Any 30-day rolling average which exceeds the lb/MMBtu NO_x and SO₂ limits in condition F6 as calculated using the following formula:

$$E_{avg} = \frac{\sum_{h=1}^n (C)_h}{n}$$

Where:

C = 1-hour average emission rate (lb/MMBtu) for hour "h" calculated using data from the CEM equipment certified and operated in accordance with part 75 and the procedures in 40 CFR part 60, Appendix A, Method 19. Valid data shall meet the requirements of WAQSR, Chapter 5, Section 2(j). Valid data shall not include data substituted using the missing data procedure in subpart D of Part 75, nor shall the data have been bias adjusted according to the procedures of Part 75.

E_{avg} = Weighted 30-day rolling average emission rate (lb/MMBtu).

n = The number of unit operating hours in the last 30 successive boiler operating days with valid emissions data meeting the requirements of WAQSR, Ch 5 Sec 2(j). A "boiler operating day" shall be defined as any 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time at the steam generating unit.

(ii) Any 30-day rolling average which exceeds the lb/hr NO_x limits in condition F6, as calculated using the following formula:

$$E_{avg} = \frac{\sum_{h=1}^n (C)_h}{n}$$

Where:

C = 1-hour average emission rate (lb/hr) for hour "h" calculated using valid data (output concentration and average hourly volumetric flowrate) from the CEM equipment certified and operated in accordance with Part 75. Valid data shall meet the requirements of WAQSR, Chapter 5, Section 2(j). Valid data shall not include data substituted using the missing data procedure in subpart D of Part 75, nor shall the data have been bias adjusted according to the procedures of Part 75.

E_{avg} = Weighted 30-day rolling average emission rate (lb/hr).

n = The number of unit operating hours in the last 30 successive boiler operating days with valid emissions data meeting the requirements of WAQSR, Chapter 5 Section 2(j). A "boiler operating day" shall be defined as any 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time at the steam generating unit.

(iii) Any 30-day rolling average which exceeds the lb/MMBtu and lb/hr CO limits in condition F6, as calculated using the following formula:

$$E_{avg} = \frac{\sum_{h=1}^n (C)_h}{n}$$

Where:

C = 1-hour average emission rate (lb/MMBtu and lb/hr) for hour "h" calculated using valid data (output concentration and average hourly volumetric flowrate) from the CEM equipment certified and operated in accordance with 40 CFR 60, Appendix B, Performance Specification 4 or 4a; 40 CFR 60, Appendix F; and the procedures in 40 CFR Part 60, Appendix A, Method 19. Valid data shall meet the requirements of WAQSR, Chapter 5, Section 2(j).

E_{avg} = Weighted 30-day rolling average emission rate (lb/MMBtu or lb/hr).

n = The number of unit operating hours in the last 30 successive boiler operating days with valid emissions data meeting the requirements of WAQSR, Ch 5 Sec 2(j). A

“boiler operating day” shall be defined as any 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time at the steam generating unit.

- (iv) Any 3-hour block average of NO_x and SO₂ emissions calculated using data from the CEM equipment required by 40 CFR Part 75 which exceeds the lb/MMBtu (NO_x and SO₂) or lb/hr (SO₂) limit established in condition F6 using valid data. Valid data shall meet the requirements of WAQSR Chapter 5, Section 2(j). The 3-hour average emission rate shall be calculated at the end of each 3-hour operating block as the arithmetic average of hourly emissions with valid data during the previous three operating hours.
 - (v) Any six-minute period during which the average opacity of emissions exceeds 20 percent with not more than one six-minute consecutive period per clock hour of not more than 27 percent opacity.
 - (c) The permittee shall comply with all reporting requirements as specified in WAQSR Ch 5, Sec 2(g) and 40 CFR Part 60, Subpart D.
 - (d) For emissions of NO_x, SO₂, and CO, the permittee shall define periods of startup and shutdown according to Appendix E.
 - (e) Exclusion of startup, shutdown, and malfunction emissions only applies to the NSPS standard(s) as authorized in the respective subpart.
 - (f) The reports shall reference this condition (F24) and be submitted to the Division in accordance with condition G4 of this permit.
- (F25) **REPORTING EXCESS EMISSIONS & DEVIATIONS FROM PERMIT REQUIREMENTS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III) and Ch 6, Sec 2 (k) Waiver January 19, 1996] (Modified September 5, 2013)**
- (a) General reporting requirements are described under the General Conditions of this permit. The Division reserves the right to require reports as provided under condition G1 of this permit.
 - (b) Emissions which exceed the limits specified in this permit and which are not reported under a different condition of this permit shall be reported annually with the emission inventory unless specifically superseded by condition G17, condition G19, or other condition(s) of this permit. The probable cause of such exceedance, the duration of the exceedance, the magnitude of the exceedance, and any corrective actions or preventative measures taken shall be included in this annual report. For sources and pollutants which are not continuously monitored, if at any time emissions exceed the limits specified in this permit by 100 percent, or if a single episode of emission limit exceedance spans a period of 24 hours or more, such exceedance shall be reported to the Division within one working day of the exceedance. (Excess emissions due to an emergency shall be reported as specified in condition G17. Excess emissions due to unavoidable equipment malfunction shall be reported as specified in condition G19.)
 - (c) Any other deviation from the conditions of this permit shall be reported to the Division in writing within 30 days of the deviation or discovery of the deviation.
 - (d) The permittee shall notify the Division’s Sheridan office in accordance with condition G19 of this permit any time the backup coal handling system (source 2) is activated.
- (F26) **GREENHOUSE GAS REPORTS [W.S. 35-11-110] (Modified September 5, 2013)**
The permittee shall submit to the Division a summary of any report(s) required to be submitted to the EPA under 40 CFR Part 98.
- (a) The reports shall be submitted to the Division within 60 days of submission to EPA, in a format as specified by the Division.
 - (b) The reports shall be submitted in accordance with condition G4(a)(i) of this permit, to the attention of the Division’s Emission Inventory Program. A copy need not be sent to the DEQ Air Quality contact.

Plantwide Applicability Limits (PAL), and PAL Monitoring, Recordkeeping and Reporting Requirements

- (F27) **NO_x AND SO₂ PAL [WAQSR Ch 6, Sec 2 Permits MD-7487 & MD-10472; Ch 6, Sec 4(b)(xv)(D)] (Modified September 5, 2013)**
- (a) NO_x and SO₂ emissions from the Wyodak Plant shall be subject to a PAL as follows:
 - (i) NO_x emissions shall not exceed 4,735.6 tons per year.
 - (ii) SO₂ emissions shall not exceed 3,293.8 tons per year.

- (iii) Each limit is based on a 12-month rolling total of all emission units.
- (b) The NO_x PAL and SO₂ PAL, as stated in this condition, shall be in effect on June 27, 2012 and shall expire on May 20, 2019, except as allowed under Ch 6, Sec 4(b)(xv)(I) and (J).
 - (i) During the PAL effective period, the Division may reopen permit MD-10472 in accordance with WAQSR Ch 6, Sec 4(b)(xv)(H).
 - (ii) If the permittee elects to renew a PAL, the permittee shall submit to the Division a timely application to renew in accordance with WAQSR Ch 6, Sec 4(b)(xv)(J). A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, May 20, 2019. This deadline for application submittal is to ensure permit MD-10472 will not expire before it is renewed. If the permittee submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until a revised version of MD-10472 is issued.
 - (iii) If the permittee decides not to renew the NO_x PAL or SO₂ PAL, the PAL will expire at the end of the PAL effective period and the Wyodak Plant will be subject to the requirements of WAQSR Chapter 6, Section 4(b)(xv)(I). An application to renew or revise the PAL, as required under WAQSR Chapter 6, Section 4(b)(xv)(I) shall be submitted at least 6 months prior to, but not earlier than 18 months prior to, May 20, 2019.
- (c) Any new emission unit to be constructed under the PAL limits or modifications/repairs to an existing unit that meets the definition of reconstruction under WAQSR Ch 5, Sec 2 (l) shall be permitted under WAQSR Ch 6, Sec 2 prior to commencing construction.

(F28) NO_x AND SO₂ PAL MONITORING [WAQSR Ch 6, Sec 2 Permits MD-6043A & MD-10472] (Modified September 5, 2013)

Compliance with the NO_x PAL and the SO₂ PAL shall be determined using a 12-month rolling total. The permittee shall monitor emissions from the Wyodak Plant as follows:

- (a) For the boiler (unit 1):
 - (i) NO_x and SO₂ emissions shall be monitored by the continuous emissions monitoring systems (CEMS) required by 40 CFR 75 and condition F13(b). Failure to use a monitoring system approved by the Division will render the PAL invalid.
 - (ii) The permittee shall provide substituted data according to the missing data procedures of 40 CFR 75 during any period of time that there is not monitoring data. All monitoring data must meet the requirements of WAQSR, Ch 5, Sec 2(j).
 - (iii) The permittee shall use EPA's Clean Air Markets reporting program to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month.
- (b) All other emission sources:
 - (i) Monthly NO_x and SO₂ emissions shall be calculated using methodology approved for the annual emissions inventory. This shall include, but not be limited to, test results, manufacturer's information, emission factors, actual throughput, and operating hours.
 - (ii) 12-month rolling total shall be calculated by summing the monthly emissions from the previous 12 months.
- (c) Emission calculations provided by the permittee to show compliance with the NO_x PAL and SO₂ PAL shall include emissions from start-ups, shutdowns and malfunctions. For NO_x and SO₂ emissions from the boiler, the permittee shall define periods of startup and shutdown as specified in Appendix E.

(F29) NO_x AND SO₂ PAL RECORDS [WAQSR Ch 6, Sec 2 Permit MD-10472] (Modified September 5, 2013)

- (a) The permittee shall retain a copy of all records necessary to determine compliance with the NO_x PAL and SO₂ PAL, including a determination of each unit's 12-month rolling total emissions and the facility's 12-month rolling total emissions, for five years from the date of such record.
- (b) The permittee shall retain a copy of the following records, for the duration of the PAL effective period plus five years:
 - (i) A copy of the PAL permit application and any applications for revisions to the PAL.
 - (ii) Each annual certification of compliance required by condition C1 of this permit and the data relied on in certifying compliance.

- (c) The permittee shall retain on-site at the facility all records kept in accordance with this condition. Records may be retained in an electronic format.

(F30) NO_x AND SO₂ PAL REPORTS

[WAQSR Ch 6, Sec 3(h)(i)(C)(III)(2); Ch 6, Sec 2 Permit MD-7487] (Modified September 5, 2013)

- (a) The permittee shall submit semi-annual PAL monitoring reports to the Division within 30 days of the end of each reporting period which include the following information:
 - (i) The identification of owner and operator and permit numbers MD-7487 and MD-10472.
 - (ii) Total annual emissions of NO_x and SO₂ (TPY) based on a 12-month rolling total for each month in the reporting period.
 - (iii) All data relied upon, including but not limited to any Quality Assurance or Quality Control data, in calculating the monthly and annual NO_x and SO₂ PAL emissions.
 - (iv) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.
 - (v) The number, duration, and cause of any deviations or monitoring malfunctions (other than time associated with zero and span calibration checks), and any corrective action taken.
 - (vi) A description of any shutdowns of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant during the shutdown.
- (b) The permittee shall submit a report to the Division within 30 days of any deviation or exceedance of the PAL requirements, including periods where no monitoring is available, and include the following:
 - (i) The identification of owner and operator and the permit number.
 - (ii) The PAL requirement that experienced the deviation or that was exceeded.
 - (iii) Emissions resulting from the deviation or the exceedance.
- (c) The reports shall reference this condition (F30) and be submitted to the Division in accordance with condition G4.

WAQSR CHAPTER 7, SECTION 3
COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS

(Modified September 5, 2013)

- (CAM-1) **COMPLIANCE ASSURANCE MONITORING REQUIREMENTS [WAQSR Ch 7, Sec 3(b) and (c)]**
The permittee shall follow the CAM plan, attached as Appendix D, and meet all CAM requirements of WAQSR Chapter 7, Section 3 as they apply to the baghouse controlled equipment as identified in conditions F13 and F14 (sources 1-4 and 11). Compliance with the source specific monitoring, recordkeeping, and reporting requirements of this permit meets the monitoring, recordkeeping, and reporting requirements of WAQSR Ch 7, Sec 3, except for additional requirements specified under conditions CAM-2 through CAM-4.
- (CAM-2) **OPERATION OF APPROVED MONITORING [WAQSR Ch 7, Sec 3(g)]**
- (a) At all times, the permittee shall maintain the monitoring under this section, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
 - (b) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities, the permittee shall conduct all monitoring in continuous operation (or at all required intervals) at all times that the pollutant specific emissions unit is operating.
 - (c) Upon detecting an excursion, the permittee shall restore operation of the pollutant-specific emission unit to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices. The response shall include minimizing the period of any start-up, shutdown or malfunction and taking any corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion.
 - (d) If the permittee identifies a failure to achieve compliance with an emission limit for which the monitoring did not provide an indication of an excursion while providing valid data, or the results of compliance or performance testing documents a need to modify the existing indicator ranges, the permittee shall promptly notify the Division and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes.
- (CAM-3) **QUALITY IMPROVEMENT PLAN (QIP) REQUIREMENTS [WAQSR Ch 7, Sec 3(h)]**
- (a) If the Division or the EPA Administrator determines, based on available information, that the permittee has used unacceptable procedures in response to an excursion or exceedance, the permittee may be required to develop and implement a Quality Improvement Plan (QIP).
 - (b) If required, the permittee shall maintain a written Quality Improvement Plan (QIP) and have it available for inspection.
 - (c) The plan shall include procedures for conducting one or more of the following:
 - (i) Improved preventative maintenance practices.
 - (ii) Process operation changes.
 - (iii) Appropriate improvements to control methods.
 - (iv) Other steps appropriate to correct control.
 - (v) More frequent or improved monitoring (in conjunction with (i)- (iv) above).
 - (d) If a QIP is required, the permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the Division if the period for completing the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
 - (e) Following implementation of a QIP, upon any subsequent determination under paragraph (a) above, the Division may require the permittee to make reasonable changes to the QIP if the QIP failed to address the cause of control device problems, or failed to provide adequate procedures for correcting control device problems as expeditiously as practicable.
 - (f) Implementation of a QIP shall not excuse the permittee from compliance with any existing emission limit(s) or any existing monitoring, testing, reporting, or recordkeeping requirements that may be applicable to the facility.
- (CAM-4) **SAVINGS PROVISIONS [WAQSR Ch 7, Sec 3(j)]**
Nothing in the CAM regulations shall excuse the permittee from compliance with any existing emission limit or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may be applicable to the facility.

**WAQSR CHAPTER 5, SECTION 2 NEW SOURCE PERFORMANCE STANDARDS (NSPS)
AND 40 CFR 60 SUBPART D REQUIREMENTS FOR FOSSIL-FUEL-FIRED STEAM GENERATORS
FOR WHICH CONSTRUCTION IS COMMENCED AFTER AUGUST 17, 1971**

(Modified September 5, 2013)

SUBPART D REQUIREMENTS [40 CFR 60 - Subparts A and D; and WAQSR Ch 5, Sec 2]

The permittee shall meet all applicable requirements of 40 CFR 60 - Subparts A and D; and WAQSR Chapter 5 Section 2 as they apply to each fossil-fuel and wood-residue-fired steam generating unit defined under §60.40, including the boiler (source 1).

**WAQSR CHAPTER 5, SECTION 2 NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND
40 CFR PART 60 SUBPART Y REQUIREMENTS FOR COAL PREPARATION & PROCESSING PLANTS**

(Modified September 5, 2013)

SUBPART Y REQUIREMENTS [40 CFR Part 60 - Subparts A and Y; and WAQSR Ch 5, Sec 2]

The permittee shall meet all applicable requirements of 40 CFR Part 60 - Subparts A and Y; and WAQSR Ch 5, Sec 2 as they apply to the affected facilities as defined under §60.250 in coal preparation plants which process more than 181 Mg (200 tons) of coal per day, including: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, coal transfer and loading systems, and open storage piles. This includes the Peerless Pit Secondary Crusher (source 11).

**WAQSR CHAPTER 5, SECTION 2 NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND
40 CFR 60 SUBPART III REQUIREMENTS
FOR STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES**

(Modified September 5, 2013)

SUBPART III REQUIREMENTS [40 CFR 60 Subparts A and III; WAQSR Ch 5, Sec 2]

As applicable, the permittee shall meet the requirements of 40 CFR 60 Subparts A and III and WAQSR Ch 5, Sec 2, as they apply to stationary compression ignition (CI) internal combustion engines. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator. An affected source is defined at §60.4200.

On December 6, 2012, engines Eng-1, Eng-2, and Eng-3 were not subject to Subpart III according to information submitted to the Division by the permittee.

Subparts are available at <http://www.gpoaccess.gov/cfr/retrieve.html>, or from the Division upon request.

WAQSR CHAPTER 5, SECTION 3 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS) AND 40 CFR 63 SUBPART ZZZZ REQUIREMENTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES

(Modified September 5, 2013)

SUBPART ZZZZ REQUIREMENTS [40 CFR 63 Subparts A and ZZZZ; WAQSR Ch 5, Sec 3]

The permittee shall meet all requirements of 40 CFR 63 Subparts A and ZZZZ and WAQSR Ch 5, Sec 3 as they apply to each affected source as indicated in §63.6590(a). An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. This facility is currently identified as a major source of HAP emissions. Affected sources at this facility include the emergency diesel generator engine, emergency diesel fire pump engine, and the standby diesel fire pump engine (sources Eng-1, Eng-2, and Eng-3).

WAQSR CHAPTER 5, SECTION 3 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS) AND 40 CFR 63 SUBPART UUUUU REQUIREMENTS FOR HAZARDOUS AIR POLLUTANTS: COAL-AND OIL-FIRED ELECTRIC UTILITY STEAM GENERATING UNITS

(Modified September 5, 2013)

SUBPART UUUUU REQUIREMENTS [40 CFR Part 63 Subparts A and UUUUU; and WAQSR Ch 5, Sec 3]

The permittee shall meet all applicable requirements of 40 CFR Part 63 Subparts A and UUUUU; and WAQSR Ch 5, Sec 3 as they apply to a new, reconstructed, and existing, coal-fired EGU (electric utility steam generating unit) or an oil-fired EGU as defined in §63.10042, including the boiler (source 1).

Subparts are available at <http://www.gpoaccess.gov/cfr/retrieve.html>, or from the Division upon request.

COMPLIANCE CERTIFICATION AND SCHEDULE

Compliance Certification [WAQSR Ch 6, Sec 3(h)(iii)(E)] (Modified September 5, 2013)

- (C1) (a) The permittee shall submit by January 31 each year a certification addressing compliance with the requirements of this permit. The certification shall be submitted as a stand-alone document separate from any monitoring reports required under this permit.
- (b) (i) For the sulfur dioxide emissions inventory, the permittee shall assess compliance with condition F4 by reviewing records kept in accordance with condition F16 and verifying reports were submitted in accordance with condition F20.
- (ii) For visible emissions from the diesel-fired engines, the permittee shall assess compliance with condition F5(c) by conducting the monitoring required by condition F12(a).
- (iii) For visible emissions from the PECS (source FUG01) and the dust extractor (source 5), the permittee shall assess compliance with condition F5(d) by conducting the monitoring required by condition F12(b).
- (iv) For particulate emissions from the boiler stack (source 1), the permittee shall assess compliance with condition F6(a) by conducting testing required by condition F10 and CAM required by condition F13(a).
- (v) For SO₂, NO_x, CO, and opacity emissions from the boiler stack, the permittee shall assess compliance with conditions F5(e) and F6(a) of this permit by conducting monitoring required by F12(d), F13(b) and F13(c).
- (vi) For waste oil incineration, the permittee shall assess compliance with condition F6(b) by conducting monitoring required by condition F13(d).
- (vii) For visible and particulate emissions from baghouse controlled equipment (sources 2-4), the permittee shall assess compliance with condition F7 by conducting CAM required by condition F14.
- (viii) For visible and particulate emissions from the Peerless Pit Secondary Crusher (source 11), the permittee shall assess compliance with conditions F7 and F5(b) by conducting CAM required by condition F14.
- (ix) The permittee shall assess compliance with the preventative maintenance and inspection requirements under condition F8 by reviewing records kept in accordance with condition F19.
- (x) For the Greenhouse Gas reports, the permittee shall verify that reports were submitted in accordance with condition F26.
- (xi) For the NO_x and SO₂ PAL, the permittee shall assess compliance with condition F27 by conducting the monitoring required by condition F28 and reviewing the records kept in accordance with condition F29.
- (xii) For any source subject to 40 CFR 60 Subpart D, the permittee shall assess compliance with Subpart D by conducting any applicable testing and monitoring, and by reviewing any records required by §60.45.
- (xiii) For any unit subject to 40 CFR 60 Subpart Y, the permittee shall assess compliance with Subpart Y by conducting any applicable testing and monitoring required by §§60.255, 60.256, and 60.257, and by reviewing the records required by §60.258.
- (xiv) For any engine subject to 40 CFR 60 Subpart IIII, the permittee shall assess compliance with Subpart IIII by conducting any applicable testing and monitoring required by §§60.4209, 60.4211, 60.4212, and 60.4213, and by reviewing the records required by §§60.4211 and 60.4214.
- (xv) The permittee shall assess compliance with Part 63 Subpart ZZZZ by conducting any applicable testing and monitoring required by §§63.6610 through 63.6640 and by reviewing the records required by §§63.6655 and 63.6665.
- (xvi) The permittee shall assess compliance with Part 63 Subpart UUUUU by conducting any applicable testing and monitoring required by §§63.10000 through 63.10023, and by reviewing the records required by §§63.10032.
- (c) The compliance certification shall include:
- (i) The permit condition or applicable requirement that is the basis of the certification;
- (ii) The current compliance status;
- (iii) Whether compliance was continuous or intermittent; and

- (iv) The methods used for determining compliance.
- (d) For any permit conditions or applicable requirements for which the source is not in compliance, the permittee shall submit with the compliance certification a proposed compliance plan and schedule for Division approval.
- (e) The compliance certification shall be submitted to the Division in accordance with condition G4 of this permit and to the Assistant Regional Administrator, Office of Enforcement, Compliance, and Environmental Justice (8ENF-T), U.S. EPA - Region VIII, 1595 Wynkoop Street, Denver, CO 80202-1129.
- (f) Determinations of compliance or violations of this permit are not restricted to the monitoring requirements listed in paragraph (b) of this condition; other credible evidence may be used.

Compliance Schedule [WAQSR Ch 6, Sec 3(h)(iii)(C) and (D)]

- (C2) The permittee shall continue to comply with the applicable requirements with which the permittee has certified that it is already in compliance.
- (C3) The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit.

GENERAL PERMIT CONDITIONS

Powers of the Administrator: [W.S. 35-11-110]

- (G1) (a) The Administrator may require the owner or operator of any point source to complete plans and specifications for any application for a permit required by the Wyoming Environmental Quality Act or regulations made pursuant thereto and require the submission of such reports regarding actual or potential violations of the Wyoming Environmental Quality Act or regulations thereunder.
- (b) The Administrator may require the owner or operator of any point source to establish and maintain records; make reports; install, use and maintain monitoring equipment or methods; sample emissions, or provide such other information as may be reasonably required and specified.

Permit Renewal and Expiration: [WAQSR Ch 6, Sec 3(c)(i)(C), (d)(ii), (d)(iv)(B), and (h)(i)(B)] [W.S. 35-11-206(f)]

- (G2) This permit is issued for a fixed term of five years. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted at least six months prior to the date of permit expiration. If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit is not a violation of WAQSR Chapter 6, Section 3 until the Division takes final action on the renewal application. This protection shall cease to apply after a completeness determination if the applicant fails to submit by the deadline specified in writing by the Division any additional information identified as being needed to process the application.

Duty to Supplement: [WAQSR Ch 6, Sec 3(c)(iii)]

- (G3) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. The permittee shall also provide additional information as necessary to address any requirements that become applicable to the facility after this permit is issued.

Submissions: [WAQSR Ch 6, Sec 3(c)(iv)] [W.S. 35-11-206(c)]

- (G4) Any document submitted shall be certified as being true, accurate, and complete by a responsible official.
 - (a) Submissions to the Division.
 - (i) Any submissions to the Division including reports, certifications, and emission inventories required under this permit shall be submitted as separate, stand-alone documents and shall be sent to:
Administrator, Air Quality Division
122 West 25th Street
Cheyenne, Wyoming 82002
 - (ii) A copy of each submission to the Administrator under paragraph (a)(i) of this condition shall be sent to the DEQ Air Quality Contact listed on page 3 of this permit.
 - (b) Submissions to EPA.
 - (i) Each certification required under condition C1 of this permit shall also be sent to:
Assistant Regional Administrator
Office of Enforcement, Compliance, and Environmental Justice (8ENFT)
U.S. EPA - Region VIII
1595 Wynkoop Street
Denver, CO 80202-1129.
 - (ii) All other required submissions to EPA shall be sent to:
Office of Partnerships and Regulatory Assistance
Air and Radiation Program (8P-AR)
U.S. EPA - Region VIII
1595 Wynkoop Street
Denver, CO 80202-1129

Changes for Which No Permit Revision Is Required: [WAQSR Ch 6, Sec 3(d)(iii)]

- (G5) The permittee may change operations without a permit revision provided that:
- (a) The change is not a modification under any provision of title I of the Clean Air Act;
 - (b) The change has met the requirements of Chapter 6, Section 2 of the WAQSR and is not a modification under Chapter 5, Section 2 or Chapter 6, Section 4 of the WAQSR and the changes do not exceed the emissions allowed under the permit (whether expressed therein as a rate of emissions or in terms of total emissions); and
 - (c) The permittee provides EPA and the Division with written notification at least 14 days in advance of the proposed change. The permittee, EPA, and the Division shall attach such notice to their copy of the relevant permit. For each such change, the written notification required shall include a brief description of the change within the permitted facility, 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. The permit shield, if one exists for this permit, shall not apply to any such change made.

Transfer of Ownership or Operation: [WAQSR Ch 6, Sec 3(d)(v)(A)(IV)]

- (G6) A change in ownership or operational control of this facility is treated as an administrative permit amendment if no other change in this permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Division.

Reopening for Cause: [WAQSR Ch 6, Sec 3(d)(vii)] [W.S. 35-11-206(f)(ii) and (iv)]

- (G7) The Division will reopen and revise this permit as necessary to remedy deficiencies in the following circumstances:
- (a) Additional applicable requirements under the Clean Air Act or the WAQSR that become applicable to this source if the remaining permit term is three or more years. Such reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended.
 - (b) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (c) The Division or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - (d) The Division or EPA determines that the permit must be revised or revoked to assure compliance with applicable requirements.

Annual Fee Payment: [WAQSR Ch 6, Sec 3(f)(i), (ii), and (vi)] [W.S. 35-11-211]

- (G8) The permittee shall, as a condition of continued operations, submit an annual fee to the Division as established in Chapter 6, Section 3 (f) of the WAQSR. The Division shall give written notice of the amount of fee to be assessed and the basis for such fee assessment annually. The assessed fee is due on receipt of the notice unless the fee assessment is appealed pursuant to W.S. 35-11-211(d). If any part of the fee assessment is not appealed it shall be paid to the Division on receipt of the written notice. Any remaining fee which may be due after completion of the appeal is immediately due and payable upon issuance of the Council's decision. Failure to pay fees owed the Division is a violation of Chapter 6, Section 3 (f) and W.S. 35-11-203 and may be cause for the revocation of this permit.

Annual Emissions Inventories: [WAQSR Ch 6, Sec 3(f)(v)(G)]

- (G9) The permittee shall submit an annual emission inventory for this facility to the Division for fee assessment and compliance determinations within 60 days following the end of the calendar year. The emissions inventory shall be in a format specified by the Division.

Severability Clause: [WAQSR Ch 6, Sec 3(h)(i)(E)]

- (G10) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Compliance: [WAQSR Ch 6, Sec 3(h)(i)(F)(I) and (II)] [W.S. 35-11-203(b)]

- (G11) The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Air Act, Article 2 of the Wyoming Environmental Quality Act, and the WAQSR and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 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 this permit.

Permit Actions: [WAQSR Ch 6, Sec 3(h)(i)(F)(III)] [W.S. 35-11-206(f)]

- (G12) This permit may be modified, revoked, reopened, and reissued, or terminated for cause. 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.

Property Rights: [WAQSR Ch 6, Sec 3(h)(i)(F)(IV)]

- (G13) This permit does not convey any property rights of any sort, or any exclusive privilege.

Duty to Provide Information: [WAQSR Ch 6, Sec 3(h)(i)(F)(V)]

- (G14) The permittee shall furnish to the Division, within a reasonable time, any information that the Division 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 Division copies of records required to be kept by the permit, including information claimed and shown to be confidential under W.S. 35-11-1101 (a) of the Wyoming Environmental Quality Act. Upon request by the Division, the permittee shall also furnish confidential information directly to EPA along with a claim of confidentiality.

Emissions Trading: [WAQSR Ch 6, Sec 3(h)(i)(H)]

- (G15) No permit revision is required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

Inspection and Entry: [WAQSR Ch 6, Sec 3(h)(iii)(B)] [W.S. 35-11-206(c)]

- (G16) Authorized representatives of the Division, upon presentation of credentials and other documents as may be required by law, shall be given permission to:
- (a) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) have access to and copy at reasonable times any records that must be kept under the conditions of this permit;
 - (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
 - (d) sample or monitor any substances or parameters at any location, during operating hours, for the purpose of assuring compliance with this permit or applicable requirements.

Excess Emissions Due to an Emergency: [WAQSR Ch 6, Sec 3(I)]

- (G17) The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency, as defined in Ch 6, Sec 3(I)(i) of the WAQSR. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (a) an emergency occurred and that 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 emissions standards, or other requirements in this permit;

- (d) The permittee submitted notice of the emergency to the Division within one working day of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

Diluting and Concealing Emissions: [WAQSR Ch 1, Sec 4]

- (G18) No person shall cause or permit the installation or use of any device, contrivance, or operational schedule which, without resulting in reduction of the total amount of air contaminant released to the atmosphere, shall dilute or conceal an emission from a source. This condition shall not apply to the control of odors.

Unavoidable Equipment Malfunction: [WAQSR Ch 1, Sec 5]

- (G19) (a) Any source believing that any emissions in excess of established regulation limits or standards resulted from an unavoidable equipment malfunction, shall notify the Division within 24 hours of the incident via telephone, electronic mail, fax, or other similar method. A detailed description of the circumstances of the incident as described in paragraph 5(a)(i)(A) Chapter 1, including a corrective program directed at preventing future such incidents, must be submitted within 14 days of the onset of the incident. The Administrator may extend this 14-day time period for cause.
- (b) The burden of proof is on the owner or operator of the source to provide sufficient information to demonstrate that an unavoidable equipment malfunction occurred.

Fugitive Dust: [WAQSR Ch 3, Sec 2(f)]

- (G20) The permittee shall minimize fugitive dust in compliance with standards in Ch 3, Sec 2(f) of WAQSR for construction/demolition activities, handling and transportation of materials, and agricultural practices.

Carbon Monoxide: [WAQSR Ch 3, Sec 5]

- (G21) The emission of carbon monoxide in stack gases from any stationary source shall be limited as may be necessary to prevent ambient standards from being exceeded.

Asbestos: [WAQSR Ch 3, Sec 8]

- (G22) The permittee shall comply with emission standards for asbestos during abatement, demolition, renovation, manufacturing, spraying and fabricating activities.
- (a) No owner or operator shall build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous dilutants to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size.
- (b) All owners and operators conducting an asbestos abatement project, including an abatement project on a residential building, shall be responsible for complying with Federal requirements and State standards for packaging, transportation, and delivery to an approved waste disposal facility as provided in paragraph (m) of Ch 3, Sec 8.
- (c) The permittee shall follow State and Federal standards for any demolition and renovation activities conducted at this facility, including:
- (i) A thorough inspection of the affected facility or part of the facility where the demolition or renovation activity will occur shall be conducted to determine the presence of asbestos, including Category I and Category II non-friable asbestos containing material. The results of the inspection will determine which notification and asbestos abatement procedures are applicable to the activity.
- (ii) The owner or operator shall follow the appropriate notification requirements of Ch 3, Sec 8(i)(ii).
- (iii) The owner or operator shall follow the appropriate procedures for asbestos emissions control, as specified in Chapter 3, Section 8(i)(iii).
- (d) No owner or operator of a facility may install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. The provisions of this paragraph do not apply to spray-applied insulating materials regulated under paragraph (j) of Ch 3, Sec 8.
- (e) The permittee shall comply with all other requirements of WAQSR Ch 3, Sec 8.

Open Burning Restrictions: [WAQSR Ch 10, Sec 2]

- (G23) The permittee conducting an open burn shall comply with all rules and regulations of the Wyoming Department of Environmental Quality, Division of Air Quality, and with the Wyoming Environmental Quality Act.
- (a) No person shall burn prohibited materials using an open burning method, except as may be authorized by permit. ***“Prohibited materials”*** means substances including, but not limited to; natural or synthetic rubber products, including tires; waste petroleum products, such as oil or used oil filters; insulated wire; plastic products, including polyvinyl chloride (“PVC”) pipe, tubing and connectors; tar, asphalt, asphalt shingles, or tar paper; railroad ties; wood, wood waste, or lumber that is painted or chemically treated; explosives or ammunition; batteries; hazardous waste products; asbestos or asbestos containing materials; or materials which cause dense smoke discharges, excluding refuse and flaring associated with oil and gas well testing, completions and well workovers.
 - (b) No person or organization shall conduct or cause or permit open burning for the disposal of trade wastes, for a salvage operation, for the destruction of fire hazards if so designated by a jurisdictional fire authority, or for fire fighting training, except when it can be shown by a person or organization that such open burning is absolutely necessary and in the public interest. Any person or organization intending to engage in such open burning shall file a request to do so with the Division.

Sulfur Dioxide Emission Trading and Inventory Program: [WAQSR Ch 14]

- (G24) Any BART (Best Available Retrofit Technology) eligible facility, or facility which has actual emissions of SO₂ greater than 100 tpy in calendar year 2000 or any subsequent year, shall comply with the applicable requirements of WAQSR Ch 14, Sections 1 through 3, with the exceptions described in sections 2(c) and 3(a).

Stratospheric Ozone Protection Requirements: [40 CFR Part 82]

- (G25) The permittee shall comply with all applicable Stratospheric Ozone Protection Requirements, including but not limited to:
- (a) *Standards for Appliances* [40 CFR Part 82, Subpart F]
The permittee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F - Recycling and Emissions Reduction, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - (i) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - (ii) 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.
 - (iii) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - (iv) Persons disposing of small appliances, MVACs and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. (“MVAC-like appliance” as defined at §82.152).
 - (v) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.166.
 - (vi) 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.
 - (vii) The permittee shall comply with all other requirements of Subpart F.
 - (b) *Standards for Motor Vehicle Air Conditioners* [40 CFR Part 82, Subpart B]
If the permittee performs a service on motor (fleet) vehicles when 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 part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term “motor vehicle” as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term “MVAC” as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant.

STATE ONLY PERMIT CONDITIONS

(Modified September 5, 2013)

The conditions listed in this section are State only requirements and are not federally enforceable.

Ambient Standards

(S1) The permittee shall operate the emission units described in this permit such that the following ambient standards are not exceeded:

POLLUTANT	STANDARD	CONDITION	WAQSR CH. 2, SEC.
PM ₁₀ particulate matter	50 micrograms per cubic meter	annual arithmetic mean	2 (a)
	150 micrograms per cubic meter	24-hr average concentration with not more than one exceedance per year	
PM _{2.5} particulate matter	15 micrograms per cubic meter	annual arithmetic mean	2 (b)
	35 micrograms per cubic meter	98 th percentile 24-hr average concentration	
Nitrogen dioxide	53 parts per billion	annual average concentration	3
	100 parts per billion	three-year average of the annual 98 th percentile of the daily maximum 1-hr average concentration	
	0.053 parts per million	annual arithmetic mean	
Sulfur dioxide	75 parts per billion	three-year average of the annual (99 th percentile) of the daily max 1-hr average	4
	0.5 parts per million	3-hr blocks not to be exceeded more than once per calendar year	
Carbon monoxide	10 milligrams per cubic meter	max 8-hr concentration with not more than one exceedance per year	5
	40 milligrams per cubic meter	max 1-hr concentration with not more than one exceedance per year	
Ozone	0.075 parts per million	three-year average of the annual fourth-highest daily maximum 8-hr average concentration	6
Hydrogen sulfide	70 micrograms per cubic meter	½ hour average not to be exceeded more than two times per year	7
	40 micrograms per cubic meter	½ hour average not to be exceeded more than two times in any five consecutive days	
Suspended sulfate	0.25 milligrams SO ₃ per 100 square centimeters per day	maximum annual average	8
	0.50 milligrams SO ₃ per 100 square centimeters per day	maximum 30-day value	
Lead and its compounds	0.15 micrograms per cubic meter	maximum arithmetic 3-month mean concentration for a 3-year period	10

Hydrogen Sulfide: [WAQSR Ch 3, Sec 7]

- (S2) Any exit process gas stream containing hydrogen sulfide which is discharged to the atmosphere from any source shall be vented, incinerated, flared or otherwise disposed of in such a manner that ambient sulfur dioxide and hydrogen sulfide standards are not exceeded.

Odors: [WAQSR Ch 2, Sec 11]

- (S3) (a) The ambient air standard for odors from any source shall be limited to an odor emission at the property line which is undetectable at seven dilutions with odor free air as determined by a scentometer as manufactured by the Barnebey-Cheney Company or any other instrument, device, or technique designated by the Division as producing equivalent results. The occurrence of odors shall be measured so that at least two measurements can be made within a period of one hour, these determinations being separated by at least 15 minutes.
- (b) Odor producing materials shall be stored, transported, and handled in a manner that odors produced from such materials are confined and that accumulation of such materials resulting from spillage or other escape is prevented.

Sulfur Oxides: [WAQSR Ch 3, Sec 4] (Modified September 5, 2013)

Source-Specific Permit Conditions

- (S4) **Reserved**

Testing Requirements

- (S5) **Reserved**

Monitoring Requirements

- (S6) **Reserved**

- (S7) **Reserved**

Recordkeeping Requirements

- (S8) **Reserved**

- (S9) **Reserved**

- (S10) **Reserved**

Reporting Requirements

- (S11) **Reserved**

- (S12) **Reserved**

- (S13) **Reserved**

ACID RAIN PERMIT CONDITIONS
ACID RAIN PORTION OF THE OPERATING PERMIT
(Modified September 5, 2013)

Issued to: Wyodak Plant
 Operated by: PacifiCorp
 ORIS code: 6101
 Effective: Same as operating permit

Acid Rain Permit Contents

- AR-1) Statement of Basis.
- AR-2) SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.
- AR-3) Comments, notes and justifications regarding permit decisions and changes made to the permit application forms during the review process, and any additional requirements or conditions.
- AR-4) The permit application submitted for this source, as corrected by the Division. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

AR-1) Statement of Basis

Statutory and Regulatory Authorities: In accordance with Chapter 11, Section 2 of the Wyoming Air Quality Standards and Regulations and Titles IV and V of the Clean Air Act, this permit is issued by the Division.

AR-2) SO₂ Allowance Allocations & NO_x Requirements for affected units.

		<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>
Unit 1	SO ₂ allowances under Table 2 of 40 CFR part 73.	<u>17,731*</u>	<u>17,731*</u>	<u>17,731*</u>	<u>17,731*</u>	<u>17,731*</u>
	NO _x limit	<p><u>Pursuant to 40 CFR 76, the Division approves a NO_x standard emissions limitation compliance plan for unit 1. The NO_x compliance plan is effective beginning in 2013 through 2017. Under the NO_x compliance plan, this unit's annual average NO_x emissions rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.7(a)(2), of 0.46 lb/MMBtu for Phase II dry bottom wall-fired boilers.</u></p> <p>In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR part 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.</p>				

* The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. The aforementioned condition does not necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

- AR-3) Comments, Notes and Justifications: None.
- AR-4) Permit Application: Attached as Appendix H of this operating permit.

SUMMARY OF SOURCE EMISSION LIMITS AND REQUIREMENTS

Source ID#: 1 Source Description: **Coal-Fired Boiler (NADB #BW91) (Modified September 5, 2013)**

Pollutant	Emissions Limit/ Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	0.015 lb/MMBtu, 71.0 lb/hr, & 308.8 TPY limits [F6] 20 percent opacity [F5]	WAQSR Ch 6, Sec 2 Permits MD-7487, MD-6043A, & MD-10472	Annual testing [F10]	CAM, monitor opacity continuously [F13]	Record testing, CAM results, and corrective action [F17 and F18]	Report test results within 45 days [F21] Report CAM results semiannually [F22] Monitoring Reports for COM [F24] Report excess emissions and permit deviations [F25]
SO ₂	0.16 lb/MMBtu 30-day rolling average; 0.5 lb/MMBtu and 2,115.0 lb/hr 3-hr block average [F6]	WAQSR Ch 6, Sec 2 Permits MD-7487 & MD-10472	Testing if required [F11]	Continuous emissions monitoring [F13]	Monitoring Records [F14 and F17]	Monitoring reports [F22 and F24] Report excess emissions and permit deviations [F25]
	Title IV Allowances [F3] 17,731 TPY (2013) [AR-2]	40 CFR 73	None	Appendix H	Appendix H	Appendix H
NO _x	0.23 lb/MMBtu & 1,081.0 lb/hr 30-day rolling average; 0.7 lb/MMBtu 3-hr block average; 4,735.6 TPY [F6]	WAQSR Ch 6, Sec 2 Permits MD-7487 & MD-10472	Testing if required [F11]	Continuous emissions monitoring [F13]	Monitoring Records [F14 and F17]	Monitoring reports [F22 and F24] Report excess emissions and permit deviations [F25]
	0.46 lb/MMBtu [AR-2]	40 CFR 76	None	Appendix H	Appendix H	Appendix H
CO	0.25 lb/MMBtu & 1,175.0 lb/hr 30-day rolling average [F6]	WAQSR Ch 6, Sec 2 Permit MD-7487	Testing if required [F11]	Continuous emissions monitoring [F13]	Monitoring Records [F14 and F17]	Monitoring reports [F22 and F24] Report excess emissions and permit deviations [F25]
HAPS	Burning of waste oil [F6]	WAQSR Ch 6, Sec 2 Waiver AP-3436	Testing if required [F11]	Monitor waste oil burning [F13]	Record waste oil burning [F17]	Burn reports [F22] Report excess emissions and permit deviations [F25]
Additional PM, SO₂, and NO_x	WAQSR Ch 5, Sec 2 and 40 CFR 60 Subparts A & D					

These tables are intended only to highlight and summarize applicable requirements for each source. The corresponding permit conditions, listed in brackets, contain detailed descriptions of the compliance requirements. Compliance with the summary conditions in these tables may not be sufficient to meet permit requirements. These tables may not reflect all emission sources at this facility.

Source ID#s: 2, 3, & 4 Source Description: Baghouse Sources (Modified September 5, 2013)

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity [F5] gr/dscf, lb/hr, and TPY limits (see Table II) [F7]	WAQSR Ch 3, Sec 2 WAQSR Ch 6, Sec 2 waiver 10/5/97 Ch 6, Sec 3(h)(i)(A)	Testing if required [F11]	CAM, monitor visible emissions daily [F14]	Record CAM results and corrective action [F17 and F18]	Report CAM results semiannually [F22] Report excess emissions and permit deviations [F25] Report backup coal handling system (source 2) activation [F25]

Source ID#s: FUG01 and 5 Source Description: Passive Enclosure Dust Control System and Dust Extractor Unit

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	No visible emissions [F5] Preventative maintenance (source 5) [F8]	WAQSR Ch 6, Sec 2 Permits MD-1079 and MD-1177	Testing if required [F11]	Daily visible observations [F12]	Monitoring Records [F17] Maintenance Records [F19]	Monitoring Reports [F22] Maintenance reports [F23] Report excess emissions and permit deviations [F25]

Source ID#: 11 Source Description: Peerless Pit Secondary Crusher (Modified September 5, 2013)

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	Less than 20 percent opacity [F5] 0.01 gr/dscf; 2.6 lb/hr; 11.4 TPY [F7]	WAQSR Ch 6, Sec 2(k) Waiver October 5, 1997 WAQSR Ch 6, Sec 3 (h)(i)(A)	Testing if required [F11]	CAM, monitor visible emissions daily [F14]	Record CAM results and corrective action [F17 and F18]	Report CAM results semiannually [F22] Report excess emissions and permit deviations [F25]
Additional PM	WAQSR Ch 5, Sec 2 and 40 CFR 60 Subparts A & Y					

These tables are intended only to highlight and summarize applicable requirements for each source. The corresponding permit conditions, listed in brackets, contain detailed descriptions of the compliance requirements. Compliance with the summary conditions in these tables may not be sufficient to meet permit requirements. These tables may not reflect all emission sources at this facility.

Source ID#: Eng-1, Eng-2, and Eng-3 Source Description: Emergency Diesel Generator, Emergency Diesel Fire Pump and Standby Diesel Fire Pump Engines

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	30 percent opacity [F5] Operation and Maintenance Plan [F8]	WAQSR Ch 3, Sec 2 and Ch 6, Sec 3(h)(i)(A)	Testing if required [F11]	Visible emissions observations [F12]	Monitoring Records [F17] Maintenance Records [F19]	Monitoring Reports [F22] Maintenance Reports [F23] Report excess emissions and permit deviations [F25]

Source ID#: H-1 through H-8 Source Description: Propane-Fired Space Heaters

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity [F5]	WAQSR Ch 3, Sec 2	Testing if required [F11]	Verify propane firing [F12]	Monitoring Records [F17]	Monitoring Reports [F22] Report excess emissions and permit deviations [F25]
NO _x	0.20 lb/MMBtu [F9]	WAQSR Ch 3, Sec 3	Testing if required [F11]	None [F15]	Test Records [F17]	Report excess emissions and permit deviations [F25]

These tables are intended only to highlight and summarize applicable requirements for each source. The corresponding permit conditions, listed in brackets, contain detailed descriptions of the compliance requirements. Compliance with the summary conditions in these tables may not be sufficient to meet permit requirements. These tables may not reflect all emission sources at this facility.

ABBREVIATIONS

AQD	Air Quality Division
BACT	Best available control technology (see Definitions)
Btu	British Thermal Unit
CAA	Clean Air Act
CAM	Compliance Assurance Monitoring
C.F.R.	Code of Federal Regulations
CO	Carbon monoxide
°F	Degrees Fahrenheit
DEQ	Wyoming Department of Environmental Quality
EPA	United States Environmental Protection Agency (see Definitions)
g	Gram(s)
g-cal/hr	Gram-calorie(s) per hour
g/hp-hr	Gram(s) per horsepower hour
gal	Gallon(s)
gr	Grain(s)
H ₂ S	Hydrogen sulfide
HAP(s)	Hazardous air pollutant(s)
hp	Horsepower
hr	Hour(s)
ID#	Identification number
lb	Pound(s)
M	Thousand
MACT	Maximum available control technology (see Definitions)
mfr	Manufacturer
mg	Milligram(s)
MM	Million
NMHC(s)	Non-methane hydrocarbon(s)
MVACs	Motor vehicle air conditioners
N/A	Not applicable
NO _x	Oxides of nitrogen
O ₂	Oxygen
OPP	Operating Permit Program
PM	Particulate matter
PM ₁₀	Particulate matter less than or equal to a nominal diameter of 10 micrometers
ppmv	Parts per million (by volume)
ppmw	Parts per million (by weight)
QIP	Quality Improvement Plan
RVP	Reid Vapor Pressure
SCF	Standard cubic foot (feet)
SCFD	Standard cubic foot (feet) per day
SCM	Standard cubic meter(s)
SIC	Standard Industrial Classification
SO ₂	Sulfur dioxide
SO ₃	Sulfur trioxide
SO _x	Oxides of sulfur
TBD	To be determined
TPY	Tons per year
U.S.C.	United States Code
µg	Microgram(s)
VOC(s)	Volatile organic compound(s)
W.S.	Wyoming Statute
WAQSR	Wyoming Air Quality Standards & Regulations (see Definitions)

DEFINITIONS

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

"Administrator" means Administrator of the Air Quality Division, Wyoming Department of Environmental Quality.

"Applicable requirement" means all of the following as they apply to emissions units at a source subject to Chapter 6, Section 3 of the WAQSR (including requirements with future effective compliance dates that have been promulgated or approved by the EPA or the State through rulemaking at the time of issuance of the operating permit):

- (a) Any standard or other requirement provided for in the Wyoming implementation plan approved or promulgated by EPA under title I of the Act that implements the relevant requirements of the Act, including any revisions to the plan promulgated in 40 C.F.R. Pat 52;
- (b) Any standards or requirements in the WAQSR which are not a part of the approved Wyoming implementation plan and are not federally enforceable;
- (c) Any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D of the Act and including Chapter 5, Section 2 and Chapter 6, Sections 2 and 4 of the WAQSR;
- (d) Any standard or other requirement promulgated under Section 111 of the Act, including Section 111(d) and Chapter 5, Section 2 of the WAQSR;
- (e) Any standard or other requirement under Section 112 of the Act, including any requirement concerning accident prevention under Section 112(r)(7) of the Act and including any regulations promulgated by EPA and the State pursuant to Section 112 of the Act;
- (f) Any standard or other requirement of the acid rain program under title IV of the Act or the regulations promulgated thereunder;
- (g) Any requirements established pursuant to Section 504(b) or Section 114(a)(3) of the Act concerning enhanced monitoring and compliance certifications;
- (h) Any standard or other requirement governing solid waste incineration, under Section 129 of the Act;
- (i) Any standard or other requirement for consumer and commercial products, under Section 183(e) of the Act (having to do with the release of volatile organic compounds under ozone control requirements);
- (j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under title VI of the Act, unless the EPA has determined that such requirements need not be contained in a title V permit;
- (k) Any national ambient air quality standard or increment or visibility requirement under part C of title I of the Act, but only as it would apply to temporary sources permitted pursuant to Section 504(e) of the Act; and
- (l) Any state ambient air quality standard or increment or visibility requirement of the WAQSR.
- (m) Nothing under paragraphs (A) through (L) above shall be construed as affecting the allowance program and Phase II compliance schedule under the acid rain provision of Title IV of the Act.

"BACT" or "Best available control technology" means an emission limitation (including a visible emission standard) based on the maximum degree of reduction of each pollutant subject to regulation under the WAQSR or regulation under the Federal Clean Air Act, which would be emitted from or which results for any proposed major emitting facility or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application or production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, he may instead prescribe a design, equipment, work practice or operational standard or combination thereof to satisfy the requirement of Best Available Control Technology. Such standard shall, to the degree possible, set forth the emission reduction achievable by implementation of such design, equipment, work practice, or operation and shall provide for compliance by means which achieve equivalent results. Application of BACT shall not result in emissions in excess of those allowed under Chapter 5, Section 2 of the WAQSR and any other new source performance standard or national emission standards for hazardous air pollutants promulgated by EPA but not yet adopted by the state.

"Department" means the Wyoming Department of Environmental Quality or its Director.

"Director" means the Director of the Wyoming Department of Environmental Quality.

"Division" means the Air Quality Division of the Wyoming Department of Environmental Quality or its Administrator.

"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 that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

"EPA" means the Administrator of the U.S. Environmental Protection Agency or the Administrator's designee.

"Fuel-burning equipment" means any furnace, boiler apparatus, stack, or appurtenances thereto used in the process of burning fuel or other combustible material for the purpose of producing heat or power by indirect heat transfer.

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

"Insignificant activities" means those activities which are incidental to the facility's primary business activity and which result in emissions of less than one ton per year of a regulated pollutant not included in the Section 112(b) list of hazardous air pollutants or emissions less than 1000 pounds per year of a pollutant regulated pursuant to listing under Section 112(b) of the Act provided, however, such emission levels of hazardous air pollutants do not exceed exemptions based on insignificant emission levels established by EPA through rulemaking for modification under Section 112(g) of the Act.

"MACT" or "Maximum achievable control technology" means the maximum degree of reduction in emissions that is deemed achievable for new sources in a category or subcategory that shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source, as determined by the Administrator. Emission standards promulgated for existing sources in a category or subcategory may be less stringent than standards for new sources in the same category or subcategory but shall not be less stringent, and may be more stringent than:

- (a) the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emission information), excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate applicable to the source category and prevailing at the time, in the category or subcategory for categories and subcategories with 30 or more sources, or

- (b) the average emission limitation achieved by the best performing five sources (for which the Administrator has or could reasonably obtain emissions information) in the category or subcategory for categories or subcategories with fewer than 30 sources.

"Modification" means any physical change in, or change in the method of operation of, an affected facility which increases the amount of any air pollutant (to which any state standards applies) emitted by such facility or which results in the emission of any such air pollutant not previously emitted.

"Permittee" means the person or entity to whom a Chapter 6, Section 3 permit is issued.

"Potential to emit" means the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored or processed, shall be treated as part of its design if the limitation is enforceable by EPA and the Division. This term does not alter or affect the use of this term for any other purposes under the Act, or the term "capacity factor" as used in title IV of the Act or the regulations promulgated thereunder.

"Regulated air pollutant" means the following:

- (a) Nitrogen oxides (NO_x) or any volatile organic compound;
- (b) Any pollutant for which a national ambient air quality standard has been promulgated;
- (c) Any pollutant that is subject to any standard established in Chapter 5, Section 2 of the WAQSR or Section 111 of the Act;
- (d) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act; or
- (e) Any pollutant subject to a standard promulgated under Section 112 or other requirements established under Section 112 of the Act, including Sections 112(g), (j), and (r) of the Act, including the following:
 - (i) Any pollutant subject to requirements under Section 112(j) of the Act. If EPA fails to promulgate a standard by the date established pursuant to Section 112(e) of the Act, 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 pursuant to Section 112(e) of the Act; and
 - (ii) Any pollutant for which the requirements of Section 112(g)(2) of the Act have been met, but only with respect to the individual source subject to Section 112(g)(2) requirement.
- (f) Pollutants regulated solely under Section 112(r) of the Act are to be regulated only with respect to the requirements of Section 112(r) for permits issued under this Chapter 6, Section 3 of the WAQSR.

"Renewal" means the process by which a permit is reissued at the end of its term.

"Responsible official" means one of the following:

- (a) For a corporation:
 - (i) 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

- (ii) 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:
 - (A) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - (B) the delegation of authority to such representative is approved in advance by the Division;
- (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; or
- (d) For affected sources:
 - (i) The designated representative or alternate designated representative in so far as actions, standards, requirements, or prohibitions under title IV of the Act or the regulations promulgated thereunder are concerned; and
 - (ii) The designated representative, alternate designated representative, or responsible official under Chapter 6, Section 3(b)(xxvi) of the WAQSR for all other purposes under this section.

"WAQSR" means the Wyoming Air Quality Standards and Regulations promulgated under the Wyoming Environmental Quality Act, W.S. §35-11-101, *et seq.*

APPENDIX A
Wyoming Hazardous Waste Rules and Regulations Ch 12, Sec 10(b)
and
40 CFR 266.108

HAZARDOUS WASTE MANAGEMENT RULES AND REGULATIONS
CHAPTER 12
STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES
AND SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES
AND
STANDARDS FOR THE MANAGEMENT OF USED OIL

Section 10. Applicability

(b) Used oil specifications . Used oil burned for energy recovery, and any fuel produced from used oil by processing, blending, or other treatment, is subject to regulation under sections 9 through 17 of this chapter unless it is shown not to exceed any of the allowable levels of the constituents and properties in the specification shown in Table 1. Once used oil that is to be burned for energy recovery has been shown not to exceed any specification and the person making that showing complies with sections 16(c), 16(d), and 16(e)(ii) of this chapter, the used oil is no longer subject to sections 9 through 17 of this chapter.

Table 1-Used Oil Not Exceeding Any Specification Level Is Not Subject to This Part When Burned for Energy Recovery¹

<u>Constituent/property</u>	<u>Allowable level</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Flash point	100 EF minimum
Total halogens	4,000 ppm maximum. ²

[Note: Applicable standards for the burning of used oil containing PCBs are imposed by 40 CFR part 761.20(e).]

FOOTNOTE: ¹The specification does not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste (see section 10(a)(ii) of this chapter).

FOOTNOTE: ²Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under section 10(a)(ii)(A) of this chapter. Such used oil is subject to section 8 of this chapter rather than sections 9 through 17 of this chapter when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

[Note: Applicable standards for the burning of used oil containing PCBs are imposed by 40 CFR part 761.20(e).]

THE UNIVERSITY OF CHICAGO
DEPARTMENT OF CHEMISTRY
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RESEARCH REPORT NO. 1000

1968

The following is a summary of the results of the experiments conducted during the period from January 1, 1968, to December 31, 1968. The experiments were carried out in the laboratory of Professor J. H. Goldstein, and the results are reported here for the first time. The experiments were carried out in the laboratory of Professor J. H. Goldstein, and the results are reported here for the first time.

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- 3. The third experiment was carried out in the laboratory of Professor J. H. Goldstein, and the results are reported here for the first time.
- 4. The fourth experiment was carried out in the laboratory of Professor J. H. Goldstein, and the results are reported here for the first time.
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**PART 266 - STANDARDS FOR THE MANAGEMENT OF SPECIFIC HAZARDOUS WASTES AND
SPECIFIC TYPES OF HAZARDOUS WASTE MANAGEMENT FACILITIES**

§266.108 Small quantity on-site burner exemption.

(a) *Exempt quantities.* Owners and operators of facilities that burn hazardous waste in an on-site boiler or industrial furnace are exempt from the requirements of this subpart provided that:

(1) The quantity of hazardous waste burned in a device for a calendar month does not exceed the limits provided in the following table based on the terrain-adjusted effective stack height as defined in §266.106(b)(3):

Exempt Quantities for Small Quantity Burner Exemption

Terrain-adjusted effective stack height of device (meters)	Allowable hazardous waste burning rate (gallons/ month)	Terrain-adjusted effective stack height of device (meters)	Allowable hazardous waste burning rate (gallons/ month)
0 to 3.9	0	40.0 to 44.9	210
4.0 to 5.9	13	45.0 to 49.9	260
6.0 to 7.9	18	50.0 to 54.9	330
8.0 to 9.9	27	55.0 to 59.9	400
10.0 to 11.9	40	60.0 to 64.9	490
12.0 to 13.9	48	65.0 to 69.9	610
14.0 to 15.9	59	70.0 to 74.9	680
16.0 to 17.9	69	75.0 to 79.9	760
18.0 to 19.9	76	80.0 to 84.9	850
20.0 to 21.9	84	85.0 to 89.9	960
22.0 to 23.9	93	90.0 to 94.9	1,100
24.0 to 25.9	100	95.0 to 99.9	1,200
26.0 to 27.9	110	100.0 to 104.9	1,300
28.0 to 29.9	130	105.0 to 109.9	1,500
30.0 to 34.9	140	110.0 to 114.9	1,700
35.0 to 39.9	170	115.0 or greater	1,900

(2) The maximum hazardous waste firing rate does not exceed at any time 1 percent of the total fuel requirements for the device (hazardous waste plus other fuel) on a total heat input or mass input basis, whichever results in the lower mass feed rate of hazardous waste.

(3) The hazardous waste has a minimum heating value of 5,000 Btu/lb, as generated; and

(4) The hazardous waste fuel does not contain (and is not derived from) EPA Hazardous Waste Nos. F020, F021, F022, F023, F026, or F027.

(b) *Mixing with nonhazardous fuels.* If hazardous waste fuel is mixed with a nonhazardous fuel, the quantity of hazardous waste before such mixing is used to comply with paragraph (a).

- (c) *Multiple stacks.* If an owner or operator burns hazardous waste in more than one on-site boiler or industrial furnace exempt under this section, the quantity limits provided by paragraph (a)(1) of this section are implemented according to the following equation:

$$\sum_{i=1}^n \frac{\text{ActualQuantityBurned}_{(i)}}{\text{AllowableQuantityBurned}_{(i)}} \leq 1.0$$

where:

n means the number of stacks;

Actual Quantity Burned means the waste quantity burned per month in device "i";

Allowable Quantity Burned means the maximum allowable exempt quantity for stack "i" from the table in (a)(1) above.

NOTE: Hazardous wastes that are subject to the special requirements for small quantity generators under §261.5 of this chapter may be burned in an off-site device under the exemption provided by §266.108, but must be included in the quantity determination for the exemption.

- (d) *Notification requirements.* The owner or operator of facilities qualifying for the small quantity burner exemption under this section must provide a one-time signed, written notice to EPA indicating the following:
- (1) The combustion unit is operating as a small quantity burner of hazardous waste;
 - (2) The owner and operator are in compliance with the requirements of this section; and
 - (3) The maximum quantity of hazardous waste that the facility may burn per month as provided by §266.108(a)(1).
- (e) *Recordkeeping requirements.* The owner or operator must maintain at the facility for at least three years sufficient records documenting compliance with the hazardous waste quantity, firing rate, and heating value limits of this section. At a minimum, these records must indicate the quantity of hazardous waste and other fuel burned in each unit per calendar month, and the heating value of the hazardous waste.

[56 FR 7208, Feb. 21, 1991; 56 FR 32690, July 17, 1991, as amended at 56 FR 42515, Aug. 27, 1991; 57 FR 38566, Aug. 25, 1992]

APPENDIX B

*Operation and Maintenance Plan for Dust Collectors and Diesel-Fired Engines
(Amended November 4, 2013)*

Air Compliance Demonstration Operation and Maintenance Plan
For Dust Collectors and Diesel Engines
Wyodak Plant

1. Material Handling Dust Collectors for Sources 2,3,4, and 11

Emission Limit/Standard – Not to exceed 20% opacity except for one six-minute period per hour of not more than 40% opacity. The Peerless Pit Secondary Crusher dust collector shall not exhibit 20% opacity or greater.

Maintain and operate each unit in accordance with manufacturer's recommendations and/or operational and maintenance practices (such as regularly scheduled preventative maintenance) that have demonstrated through periodic inspections that the dust collector is consistently operating in a manner that maintains compliance with the opacity limits.

During the periodic inspection of each material handling system, a visual observation of equipment performance will be made by a "qualified observer".

If a visual emission or significant accumulation of dust is observed in the vicinity of the dust collector, the specific dust collector will be inspected for damage and repaired as needed. The corrective action taken will be documented in the maintenance records.

A summary of the visible emissions monitoring and a summary of corrective actions taken will be submitted to the Division by January 31 and July 31 of each year.

2. Emergency Diesel Generators and Diesel Fire Pumps

Emission Limit/Standard – Not to exceed 30% opacity limit.

Maintain and operate each system in accordance with manufacturer's recommendations and/or operational and maintenance practices (such as regularly scheduled preventative maintenance) that have demonstrated through periodic inspections that the diesel equipment is consistently operating in a manner that maintains compliance with the opacity limits.

During the periodic operational tests of the units to ensure availability, a visual observation of equipment performance will be made by a "qualified observer".

If a significant visual emission is observed from the diesel equipment, the engine will be inspected for damage and repaired as needed. The corrective action taken will be documented in the maintenance records.

A summary of the visible emissions monitoring and a summary of corrective actions taken will be submitted to the Division by January 31 and July 31 of each year.

APPENDIX C

*Preventative Maintenance Plan for Dust Extractor Unit
(Amended November 4, 2013)*

ENGART DUST EXTRACTION SYSTEM PM PROCEDURE

Date: _____

Name: _____

1. Before doing any work, check and record the air flow readings with the dust extractor running. Record values in the Table below.

BEFORE MAINTENANCE TABLE

AREA	AIR FLOW READINGS
Inlet	
H-Belt	
Methane Leg	
Redler Leg	
J1	
J2	
J3	
J4	

2. With the dust extractor shut off and clearance issued (**note: you may not want to clear out the water so that you can see how the sprays are performing while the rest of the machine is tagged out**):

- A. Open the inspection hatch in the ductwork next to the dust extractor and clean out all the debris.

Inspect the fan rotor for wear. Look for severe wear and cracks on fan impellers. Document any wear found. Write corrective order for necessary repairs. Re-secure the hatch when done.

- B. Open up the water chamber of the dust extractor and:

1. Remove and clean the knitmesh panel. Document level of build-up found on the panel.

2
*Printed copies of this document are "uncontrolled" and for reference only.
Please consult P8 document management system for most current controlled copy.*

*Issue Date: 05/11/05
Reviewed Date: 05/15/13
Revised Date: 05/15/13*

10-28-2013 033101

2. Remove and clean each of the demister panels. Make note of their orientation with respect to the machine so that they can be properly reinstalled. Document the level of build-up found on each tray.

3. Inspect the water chamber, document any abnormalities found and remove any debris found within.

4. Inspect the spray nozzles, run water through the nozzles to verify that they are spraying properly. Replace any nozzles that are defective.

5. Make sure the drain piping is clear and not plugged off. This can be verified by running a hose down it.

6. Clean up any coal build-up on the air deflectors of the outlet.

7. Reinstall the knitmesh panel and demister trays. Make sure the demister trays are oriented properly with respect to the machine.

C. Close up and seal as necessary the water chamber of the dust extractor.

3 When maintenance work is complete, remove the clearance and re-start the machine. Check and record the air readings. Record values in the Table below.

AFTER MAINTENANCE TABLE

AREA	AIR FLOW READINGS
Inlet	
H-Belt	
Methane Leg	
Redler Leg	
J1	
J2	
J3	
J4	

4. Grease the motor bearings with Royal Purple. Please only use 3 pumps with grease gun per bearing.

***** NOTE: ANY CHANGES TO THIS PROCEDURE MUST FIRST BE APPROVED BY THE DEQ, AIR QUALITY DIVISION.**

Additional Comments:

APPENDIX D
Compliance Assurance Monitoring (CAM) Plans
(Amended November 4, 2013)

**PacifiCorp Energy
Wyodak Power Plant Boiler
Compliance Assurance Monitoring Plan**

I. Background

A. Emissions Unit

Description: Wyodak Boiler
Identification: Emission Source ID #1
Facility: Wyodak Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: Permit MD-7487
Permit MD-6043A

Emission Limits:

Particulate Matter: 0.015 lb/MMBtu
71.0 lb/hour

Opacity: 20 percent

Monitoring requirements: 40 CFR 60, Appendix A, Method 5, or an alternate method approved by the Executive Secretary

C. Control Technology: Fabric Filter Baghouse

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1. Boiler exhaust stack opacity is monitored as the indicator of particulate matter collection and pollution control equipment performance.

This compliance assurance monitoring plan has been prepared to comply with the standard contained in 40 CFR 60.48Da(o)(2).

Table 1: Monitoring Approach

	Indicator
I. Indicator Measurement Approach	<p>Opacity values measured in the boiler exhaust stack are monitored as the indicator of particulate matter emissions compliance.</p> <p>Opacity is measured directly by a continuous opacity monitor installed in the flue gas exhaust stack.</p>
II. Indicator Range	<p>An excursion is defined as a 24-hour daily average opacity value greater than the baseline level of 5.0% opacity.* Excursions trigger a baghouse inspection, corrective actions and a reporting requirement.</p> <p>If the measured 24-hour average opacity remains at a level greater than the opacity baseline level after seven consecutive boiler operating days, a new particulate matter performance test will be conducted to establish a new opacity baseline value. This new performance test will be conducted within 60 days of the date that the measured 24-hour average opacity was first determined to exceed the baseline opacity level unless a waiver or variance is granted by the Wyoming Division of Air Quality.</p>
III. Performance Criteria A. Data Representativeness B. Verification of Operational Status C. QA/QC Practices and Criteria	<p>Opacity is measured in the boiler exhaust stack prior to discharge to atmosphere.</p> <p>The opacity monitor is installed, operated and maintained per Performance Specification 1.</p> <p>The opacity monitor is installed and operated in compliance with 40 CFR 60, Appendix B, Performance Specification 1</p>

* The indicator range value (baseline level) is established annually following completion of testing to verify compliance with the applicable 0.015 lb/MMBtu and 71.0 lb/hour particulate matter emission limits. The baseline level is equivalent to the average opacity measured by the continuous opacity monitor system (COMS) during the annual particulate matter emissions testing plus 2.5%, or a total opacity value of 5.0%, whichever is greater.

Table 1: Monitoring Approach (continued)

		Indicator
III.	Performance Criteria	
	D. Measurement Approach	Opacity is monitored continuously.
	Data Collection Procedures	Opacity is monitored by a COMS and recorded by a data acquisition and handling system.
	Averaging Period	24-hour daily average

Monitoring Approach Justification

I. Background

The pollutant-specific emission unit at this source is the Wyodak boiler (emission source 1). The emission source is a coal-fired boiler that is used to generate steam to produce electricity. Flue gas from the combustion process is discharged from the boiler, through a flue gas desulfurization system (scrubber), then through a fabric filter baghouse and is discharged to the atmosphere via a tall stack. The scrubber is used to remove sulfur dioxide (SO₂) from the flue gas stream. The fabric filter baghouse is a pollution control device used to remove particulate matter and fly ash entrained in the flue gas stream. An opacity monitor is installed in the boiler exhaust stack that measures flue gas opacity prior to discharge to the atmosphere.

PacifiCorp has prepared this CAM plan using the guidelines indicated in 40 CFR 60.48Da(o) which provides an approach to use opacity as an indicator of compliance with the applicable particulate matter emissions standard.

II. Rationale for Selection of Performance Indicators

Because opacity is an indicator of particulate matter emissions, continuous opacity monitoring is utilized as an indicator of particulate matter emissions. In general, an increase in visible emissions (opacity) indicates reduced performance of the pollution control equipment (fabric filter baghouse) and an increase in the particulate matter emission rate.

In the method indicated in 40 CFR 60.48Da(o), opacity will be measured during the required annual particulate matter emissions testing that is conducted to demonstrate compliance with the source's 0.015 lb/MMBtu and 71.0 lb/hour particulate matter emission limits. Average opacity values obtained from each of the three required test runs will be averaged together. If the 3-run average opacity value is greater than 2.5%, 2.5% will be added to the 3-run average value to establish the *baseline level*. If the three-run average value is less-than-or-equal-to 2.5% opacity, the baseline level will be set at 5.0% opacity.

III. Rationale for Selection of Indicator Ranges

As indicated in 40 CFR 60.48Da(o), the average opacity values obtained from the COMS during the annual particulate matter emission testing are used to establish the baseline opacity level which is equivalent to the indicator range value. The indicator range value is established initially and is then verified or reset annually following completion of the required annual particulate matter emissions testing.

For purposes of this CAM plan particulate matter emissions testing conducted on the Wyodak boiler in June 2011 following construction and startup of the fabric filter baghouse and scrubber and annual compliance testing on May 15, 2012 was used to establish the indicator range value. Testing was conducted during normal operation and at high unit load conditions. The following table identifies the 2011 and 2012 particulate matter test result data.

Table 2: Wyodak Boiler 2011 and 2012 Particulate Matter Test Result Summary

	Date	Start Time	End Time	Particulate Matter Emission Rate (lb/MMBtu)	Particulate Matter Emission Rate (lb/hour)	Average Opacity (percent)
Run 1	June 27, 2011	0725	0845	0.0070	28.21	1.6
Run 2	June 27, 2011	0911	1028	0.0050	20.26	1.5
Run 3	June 27, 2011	1053	1211	0.0062	24.41	1.6
Run 1	May 15, 2012	1040	1152	0.010	42	0.4
Run 2	May 15, 2012	1218	1330	0.008	35	0.4
Run 3	May 15, 2012	1404	1518	0.011	48	0.5

The average opacity value during the 2011 particulate matter emission test was 1.6 percent and the average opacity value during the 2012 particulate matter emission test was 0.4 percent. For purposes of this CAM plan the baseline level/indicator range value is currently set at 5.0 percent opacity.

Average boiler exhaust stack opacity is measured by a continuous opacity monitoring system (COMS). The COMS measures opacity at a minimum frequency of once every 10 seconds and uses the data to calculate a 6-minute average. The 6-minute averages are used to calculate the 24-hour daily average opacity value. The Wyodak boiler emission source is deemed to be in compliance with its 0.015 lb/MMBtu and 71.0 lb/hour particulate matter emission limits if the 24-hour daily opacity average value is less-than-or-equal-to the baseline level (indicator range value).

Testing Schedule and Operating Parameters

For purposes of this CAM plan particulate matter emission testing conducted on June 27, 2011 and May 15, 2012 was used to establish the baseline level opacity value of 5.0 percent opacity. Unless an extension is requested by PacifiCorp and a waiver is granted by the Wyoming Division of Air Quality, annual particulate matter emissions testing will be conducted within 12 calendar months following completion of the previous year's particulate matter emissions testing. Annual testing will be conducted during normal unit operation, including normal operation of all pollution control equipment, and at high unit load.

IV. Recordkeeping and Reporting

A. Recordkeeping

Continuous opacity monitor measurements are recorded and stored in the facility's data acquisition and handling system (DAHS). PacifiCorp utilizes the measured opacity data collected and stored in the DAHS to provide quarterly Wyodak reports to the Wyoming Division of Air Quality regarding compliance with the source's 20 percent opacity limit. The quarterly reports include QA/QC measures, monitor downtime and periods of excess emissions (6-minute average opacity values above the 20 percent limit).

B. Reporting

PacifiCorp proposes to include a section regarding Wyodak boiler CAM plan compliance in the semi-annual monitoring and maintenance reports that are submitted to the Wyoming Division of Air Quality. These semi-annual reports include any 24-hour periods that indicate an excursion from the indicator range (baseline level) value of 5.0 percent opacity.

C. Excursions

Daily average opacity excursions from the CAM plan indicator range value will be reported to the Wyoming Division of Air Quality. PacifiCorp will notify the Wyoming Division of Air Quality within 14 days of the excursion via e-mail, FAX or phone call. The notification will include the cause of the excursion, if known, and corrective actions taken to correct the problem.

If CAM plan excursions occur during seven consecutive days in a calendar year, PacifiCorp will conduct particulate matter emissions testing to establish a new baseline level opacity value (indicator range value). The new performance test will be conducted within 60 days of the date that the measured 24-hour daily average opacity was first determined to exceed the baseline opacity level unless a waiver is granted by the Wyoming Division of Air Quality.



D. Performance Criteria

Data Representativeness:

Measurements are conducted at the emission point.

Verification of Operational Status:

Not applicable.

QA/QC Practices and Criteria:

The observer will be a Method 22 trained observer and will follow Method 22-like procedures.

Monitoring Frequency and Data Collection Procedure:

A one-minute Method 22-like observation will be performed daily.

III. Justification

A. Background

This facility is an electricity-generating power plant. The pollutant-specific emission unit is the T-1 Transfer House Baghouse, emission source ID No. 2. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Wyodak Plant. The T-1 Transfer House Baghouse filters approximately 4,500 ft³ of air per minute from the coal handling conveying system.

B. Rationale for Selection of Performance Indicator

Visible emissions was selected as the performance indicator because it is indicative of operation of the baghouse in a manner necessary to comply with the particulate emission standard. When the baghouse is operating properly, there will not be any visible emissions from the baghouse exhaust. Any increase in visible emissions indicates reduced performance of a particulate control device; therefore the presence of visible emissions is used as a performance indicator.

C. Rationale for Selection of Indicator Level

The selected indicator range is no visible emissions. When an excursion occurs, corrective actions will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported. An indicator range of no visible emissions was selected because: (1) an increase in visible emissions is indicative of an increase in particulate emissions; and (2) a monitoring technique which does not require a Method 9 certified observer is desired. Although Reference Method 22 applies to fugitive emissions sources, the visible/not visible emissions observation technique of RM-22 can be applied to ducted emissions; i.e., Method 22-like observations.

D. Performance Criteria

Data Representativeness:

Measurements are conducted at the emission point.

Verification of Operational Status:

Not applicable.

QA/QC Practices and Criteria:

The observer will be a Method 22 trained observer and will follow Method 22-like procedures.

Monitoring Frequency and Data Collection Procedure:

A one-minute Method 22-like observation will be performed daily.

III. Justification

A. Background

This facility is an electricity-generating power plant. The pollutant-specific emission unit is the T-2 Transfer House Baghouse, emission source ID No. 3. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Wyodak Plant. The T-2 Transfer House Baghouse filters approximately 3,500 ft³ of air per minute from the coal handling conveying system.

B. Rationale for Selection of Performance Indicator

Visible emissions was selected as the performance indicator because it is indicative of operation of the baghouse in a manner necessary to comply with the particulate emission standard. When the baghouse is operating properly, there will not be any visible emissions from the baghouse exhaust. Any increase in visible emissions indicates reduced performance of a particulate control device; therefore the presence of visible emissions is used as a performance indicator.

C. Rationale for Selection of Indicator Level

The selected indicator range is no visible emissions. When an excursion occurs, corrective actions will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported. An indicator range of no visible emissions was selected because: (1) an increase in visible emissions is indicative of an increase in particulate emissions; and (2) a monitoring technique which does not require a Method 9 certified observer is desired. Although Reference Method 22 applies to fugitive emissions sources, the visible/not visible emissions observation technique of RM-22 can be applied to ducted emissions; i.e., Method 22-like observations.

D. Performance CriteriaData Representativeness:

Measurements are conducted at the emission point.

Verification of Operational Status:

Not applicable.

QA/QC Practices and Criteria:

The observer will be a Method 22 trained observer and will follow Method 22-like procedures.

Monitoring Frequency and Data Collection Procedure:

A one-minute Method 22-like observation will be performed daily.

III. Justification

A. Background

This facility is an electricity-generating power plant. The pollutant-specific emission unit is the Silo Methane Purge Exhauster, emission source ID No. 4. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Wyodak Plant. The Silo Methane Purge Exhauster filters approximately 17,000 ft³ of air per minute from the coal handling conveying system.

B. Rationale for Selection of Performance Indicator

Visible emissions was selected as the performance indicator because it is indicative of operation of the baghouse in a manner necessary to comply with the particulate emission standard. When the baghouse is operating properly, there will not be any visible emissions from the baghouse exhaust. Any increase in visible emissions indicates reduced performance of a particulate control device; therefore the presence of visible emissions is used as a performance indicator.

C. Rationale for Selection of Indicator Level

The selected indicator range is no visible emissions. When an excursion occurs, corrective actions will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported. An indicator range of no visible emissions was selected because: (1) an increase in visible emissions is indicative of an increase in particulate emissions; and (2) a monitoring technique which does not require a Method 9 certified observer is desired. Although Reference Method 22 applies to fugitive emissions sources, the visible/not visible emissions observation technique of RM-22 can be applied to ducted emissions; i.e., Method 22-like observations.

Compliance Assurance Monitoring Plan:
Fabric Filter Baghouse for Particulate Matter Control
Wyodak Plant

I. Background

A. Emissions Unit Peerless Pit Secondary Crusher
Description: Fabric Filter Baghouse
Identification: Source ID #11
Facility: Wyodak Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: WAQSR Chapter 3, Section 2 and
Chapter 6, Section 2,

Emission Limits:
Particulate Matter: 2.6 lbs. per hour

Monitoring Requirements: Daily Observations

C. Control Technology

Fabric Filter Baghouse

Monitoring Approach

The key elements of the monitoring approach are presented below.

A. Indicator

Visible emissions will be used as an indicator.

B. Measurement Approach

Visible emissions from the source ID No. 11 baghouse exhaust will be monitored daily using EPA Reference Method 22-like procedures.

C. Indicator Range

The indicator range is no visible emissions.

D. Performance Criteria

Data Representativeness:

Measurements are conducted at the emission point.

Verification of Operational Status:

Not applicable.

QA/QC Practices and Criteria:

The observer will be a Method 22 trained observer and will follow Method 22-like procedures.

Monitoring Frequency and Data Collection Procedure:

A one-minute Method 22-like observation will be performed daily.

III. Justification

A. Background

This facility is an electricity-generating power plant. The pollutant-specific emission unit is the Peerless Pit Secondary Crusher Baghouse, emission source ID No. 11. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Wyodak Plant. The Peerless Pit Secondary Crusher Baghouse filters approximately 30,500 ft³ of air per minute from the coal crushing and conveying system.

B. Rationale for Selection of Performance Indicator

Visible emissions was selected as the performance indicator because it is indicative of operation of the baghouse in a manner necessary to comply with the particulate emission standard. When the baghouse is operating properly, there will not be any visible emissions from the baghouse exhaust. Any increase in visible emissions indicates reduced performance of a particulate control device; therefore the presence of visible emissions is used as a performance indicator.

C. Rationale for Selection of Indicator Level

The selected indicator range is no visible emissions. When an excursion occurs, corrective actions will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported. An indicator range of no visible emissions was selected because: (1) an increase in visible emissions is indicative of an increase in particulate emissions; and (2) a monitoring technique which does not require a Method 9 certified observer is desired. Although Reference Method 22 applies to fugitive emissions sources, the visible/not visible emissions observation technique of RM-22 can be applied to ducted emissions; i.e., Method 22-like observations.

APPENDIX E
Wyodak Plant Startup and Shutdown Definitions
(Modified September 5, 2013)

Wyodak Plant Startup and Shutdown Definitions

1. General Emission Description

The intent of this Wyodak Plant Start up and Shutdown Minimization Plan ("Minimization Plan") is to minimize the duration and extent of emissions during periods of boiler startup and shutdown.

2. Startup General Description

Fuel oil is the initial heat input source used during a boiler unit startup. As boiler, turbine equipment and steam temperatures rise to design values, coal mills (pulverizers) are gradually placed into service concurrently with fuel oil firing. Generally, three pulverizers are operational during the end phase of the boiler startup process. As steam and equipment temperatures continue to rise while co-firing on fuel oil and coal, the boiler combustion process stabilizes adequately such that fuel oil firing can cease.

3. Startup Definition

Unit startup begins when fuel oil is introduced into the boiler. Start up ends when the unit reaches at least an hourly gross load of 180 megawatts (MWs). At an hourly gross load of 180 MWs flue gas temperatures to the flue gas desulphurization system (scrubber) reach a temperature of 275 F and three coal pulverizers have been placed in service. Startup does not extend beyond twenty (20) hours per startup period.

4. Shutdown General Description

Unit shutdown begins when the unit load/output is reduced with the intent of removing the unit from service. Shutdown ends at the point when fuel input to the boiler ceases.

Shutdown events will generally be of short duration. During planned unit shutdown events, generator electrical power output will be gradually reduced as steam generation and thermal input to the boiler, via coal combustion, are reduced. Eventually the generator will be disconnected from the electrical power grid and fuel input to the boiler will cease.

5. Shutdown Definition

Shutdown begins when the unit load / output is reduced with the intent of removing the unit from service. Shutdown ends at the cessation of fuel input to the boiler.

6. Reporting and Recordkeeping

Startup and shutdown emissions will be controlled by minimizing the frequency and duration of plant startup and shutdown events. Records will be maintained that document the number and duration of individual startup and shutdown events.

Wyodak Plant personnel will record each boiler unit startup event and log the following information:

- a. The date and time of each startup event (initiation of boiler fuel oil firing).
- b. The end time of the startup event, which is no later than the point in time when the unit reaches at least an hourly gross load of 180 megawatts (MWs). At an hourly gross load of 180 MWs flue gas temperatures to the flue gas desulphurization system (scrubber) reach a temperature of 275 F and three coal pulverizers have been placed in service.
- c. The total duration of a startup event. The total duration of an individual startup event is not to exceed twenty (20) hours.
- d. Unit gross load during the start up event will also be recorded.

Wyodak Plant personnel will record each boiler unit shutdown event and log the following information:

- a. The date, time, and duration of each shutdown episode including:
 1. The start time of the shutdown event
 2. The end time of the shutdown event

APPENDIX F
Reserved

(Modified September 5, 2013)

APPENDIX G
Reserved

(Modified September 5, 2013)

APPENDIX H
Acid Rain Permit Application
(Modified September 5, 2013)

STEP 3

Read the standard requirements

Permit Requirements

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

STEP 3,
Cont'd.

Nitrogen Oxides Requirements The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

Step 3,
Cont'd.

Liability, Cont'd.

- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

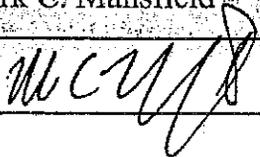
- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Certification

Read the certification statement, sign, and date

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Mark C. Mansfield	
Signature 	Date 9/6/07



Phase II NO_x Compliance Plan

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

Page of

This submission is: New Revised

STEP 1

Indicate plant name, State, and ORIS code from NADB, if applicable

Plant Name Wyodak Plant	WY State	6101 ORIS Code
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STEP 2

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

ID# BW91	ID#	ID#	ID#	ID#	ID#
Type DBW	Type	Type	Type	Type	Type

(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)

<input type="checkbox"/>					
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(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)

<input type="checkbox"/>					
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(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)

<input type="checkbox"/>					
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(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)

<input checked="" type="checkbox"/>	<input type="checkbox"/>				
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(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)

<input type="checkbox"/>					
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(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)

<input type="checkbox"/>					
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(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)

<input type="checkbox"/>					
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(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)

<input type="checkbox"/>					
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(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)

<input type="checkbox"/>					
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(j) NO_x Averaging Plan (include NO_x Averaging form)

<input type="checkbox"/>					
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(k) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)

<input type="checkbox"/>					
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(l) Common stack pursuant to 40 CFR 75.17(a)(2)(i)(B) with NO_x Averaging (check the NO_x Averaging Plan box and include NO_x Averaging form)

<input type="checkbox"/>					
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Plant Name (from Step 1)

STEP 2, cont'd.

ID# BW91	ID#	ID#	ID#	ID#	ID#
Type DBW	Type	Type	Type	Type	Type

(m) EPA-approved common stack apportionment method pursuant to 40 CFR 75.17(a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)

<input type="checkbox"/>					
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(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)

<input type="checkbox"/>					
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(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing

<input type="checkbox"/>					
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(p) Repowering extension plan approved or under review

<input type="checkbox"/>					
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STEP 3
Read the standard requirements and certification, enter the name of the designated representative, sign &

Standard Requirements

General. This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

Special Provisions for Early Election Units

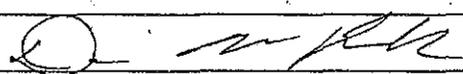
Nitrogen Oxides. A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO_x as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).

Liability. The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

Termination. An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO_x for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO_x for Phase II units with Group 1 boilers under 40 CFR 76.7.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Dana M. Ralston	
Signature		Date
		October 22, 2012