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. 3-1-120-2

Issue Date: **September 6, 2005**
Expiration Date: **January 1, 2008**
Effective Date: **September 6, 2005**
Replaces Permit No.: **31-120-1**

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
Jim Bridger Plant
Section 3, Township 20 North, Range 101 West
Sweetwater 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.

Dan Olson, Administrator
Air Quality Division

Date

John V. Corra, Director
Department of Environmental Quality

Date

WAQSR CHAPTER 6, SECTION 3 OPERATING PERMIT

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

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(Modified June 15, 2004) **(Modified September 6, 2005)** *(Amended August 16, 2006)*

GENERAL INFORMATION

(Modified June 15, 2004)(Amended June 16, 2006) ***(Amended December 27, 2006)***

Company Name: **PacifiCorp**

Mailing Address: **1407 West North Temple**

City: **Salt Lake City** State: **Utah** Zip: **84116**

Plant Name: **Jim Bridger Plant**

Plant Location: **Section 3, Township 20 North, Range 101 West, Sweetwater County, Wyoming (Approximately 28 miles northeast of Rock Springs, seven miles north of Interstate 80 at Point of Rocks)**

Plant Mailing Address: **P.O. Box 158**

City: **Point of Rocks** State: **Wyoming** Zip: **82942**

Name of Owner: **PacifiCorp** Phone: **(801) 220-2000**

Designated Representative: ***Mark C. Mansfield*** Phone: **(801) 220-*4589***

Alternative Designated Representative: **Robert P. Arambel** Phone: **(307) 352-4220**

Responsible Official: **Robert Arambel** Phone: **(307) 352-4220**

Plant Environmental Contact: ***Robert Arambel*** Phone: **(307) 352-*4220***

DEQ Air Quality Contact: **District 5 Engineer**
510 Meadowview Drive
Lander, Wyoming 82520
Phone: **(307) 332-6755**

SIC Code: **4911**

Description of Process: **The primary purpose of this facility is to produce electricity through the combustion of coal. Coal is pulverized and combusted to generate thermal energy to heat water and produce steam. Steam is then routed to turbines and converted to mechanical energy which is used to drive electric generators and produce electricity.**

SOURCE EMISSION POINTS

(Modified June 15, 2004)

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

SOURCE ID #	SOURCE DESCRIPTION	SIZE	CH. 6, SEC. 2 PERMITS
1	NADB #BW71 Tangential Coal Fired Boiler (ESP)	5610 MMBtu/hr	None
2	NADB #BW72 Tangential Coal Fired Boiler (ESP)	5610 MMBtu/hr	None
3	NADB #BW73 Tangential Coal Fired Boiler (ESP)	5610 MMBtu/hr	None
4	NADB #BW74 Tangential Coal Fired Boiler (ESP)	5610 MMBtu/hr	OP-228
10	Cooling Towers Units 1-4	160,000 gpm each	None
11	01 Secondary Crusher Building Transfer Points *	2200 TPH	MD-307
12	Units 1-3 Distribution Bin Transfer Points **	830 TPH	MD-883
13	Unit 1 Conveyor Transfer Points & Silo Vent **	277 TPH	MD-307, MD-883
14	Unit 2 Conveyor Transfer Points & Silo Vent **	277 TPH	MD-307, MD-883
15	Unit 3 Conveyor Transfer Points & Silo Vent **	277 TPH	MD-307, MD-883
16	91 Secondary Crusher Building Transfer Points *	277 TPH	MD-307, MD-883
17	Unit 4 Conveyor Transfer Points & Silo Vent **	277 TPH	MD-307, MD-883
18	02 Secondary Crusher Building Transfer Points *	1500 TPH	OP-267
19	Railcar/Truck Unloading Transfer Points *	2200 TPH	OP-267
20	Overland Conveyor Interface Building Transfer Points ***	1500 TPH	OP-267, MD-883
21	02 Reclaim Tunnel Transfer Points *	2200 TPH	OP-267
22	02A Reclaim Tunnel Transfer Points *	1500 TPH	OP-267
23	Coal Transfer to Coal Piles	9.5×10^6 TPY	OP-267
24	Coal Storage	1.0×10^6 tons	OP-267
25	Plant Site Roadways	N/A	OP-267
26	Ash Unloading	9.5×10^5 TPY	OP-267; Nov. 27, 1998 Waiver AP-589
27	Ash Haul to Landfill	9.5×10^5 TPY	OP-177 & OP-267
N/A	Emergency Diesel-Fired Generator Engine	979 hp	None
N/A	Emergency Diesel-Fired Generator Engine	979 hp	None
N/A	Emergency Diesel-Fired Fire Pump Engine	190 hp	None

* Particulate matter emissions controlled by baghouse

** Particulate matter emissions controlled by baghouse or dust extractor system

*** Particulate matter emissions controlled by baghouse or dry fog system

TOTAL FACILITY ESTIMATED EMISSIONS

(Modified June 15, 2004)

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

POLLUTANT	EMISSIONS (TPY)
CRITERIA POLLUTANT EMISSIONS	
Particulate Matter [1]	14,063
PM_{10} Particulate Matter [1]	13,616
Sulfur Dioxide (SO_2) [2]	27,029
Nitrogen Oxides (NO_X) [3]	41,281
Carbon Monoxide (CO) [4]	2,559
Volatile Organic Compounds (VOCs) [4]	308
HAZARDOUS AIR POLLUTANT (HAP) EMISSIONS [4]	89

[1] Particulate matter and PM_{10} particulate matter emissions are calculated from the emission limits for the boilers on a lb/MMBtu basis and the heat input for the boilers from the source emissions points table of this permit plus the emissions for all other units as estimated in the operating permit application.

[2] SO_2 emissions are calculated from the source-specific and state only emission limits for the four boilers.

[3] NO_X emissions are calculated from the acid rain permit emission limits for the four boilers.

[4] CO, VOC, and HAP emissions are taken from the estimates calculated in the operating permit application.

Emissions modified to reflect dust extractor system installed on source 12

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 the Clean Air Act 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) FUGITIVE EMISSIONS [WAQSR Ch 6, Sec 2, Permits OP-267 & MD-307]

(a) The permittee shall treat all unpaved plant trafficked areas (Sources 25 & 27) at the Jim Bridger Power Plant with a suitable dust suppressant chemical on a regular basis and submit an annual dust control report for Division approval as described under condition F42 of this permit.

(b) The permittee shall maintain the revegetation of areas on and around the Jim Bridger Plant site to assure no major barren areas develop which might be a concern for significant blowing dust.

Source-Specific Permit Conditions

(F5) VISIBLE EMISSIONS [WAQSR Ch 3, Sec 2 and Ch 6, Sec 2 Permit MD-883] (Modified June 15, 2004)

(a) The dry fog system, once installed, will be operated and maintained so that it exhibits no visible emissions from the overland conveyor interface building transfer points (source 20), which includes the coal transfer operations from the overland conveyor to the 01A and 01W conveyors.

(b) The dust extractor systems, once installed, will be operated and maintained so that they exhibit no visible emissions from the units 1-3 distribution bin transfer points, and units 1-4 conveyor transfer points and silo vents (sources 12, 13, 14, 15 and 17).

(c) Unless a lower limit is specified elsewhere in this permit, visible emissions of any contaminant discharged into the atmosphere from any other single source of emission shall not exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 40 percent opacity.

(F6) COAL-FIRED BOILER EMISSIONS
[WAQSR Ch 3, Sec 3, Ch 3, Sec 2, and Ch 6, Sec 2, Permit OP-228, and 40 CFR 60 Subpart D]

(a) Emissions from boilers 1, 2, and 3 (sources 1 through 3) shall be limited to:
- (i) 0.70 lb/MMBtu of heat input of NO_X;
- (ii) 0.10 lb/MMBtu of heat input of particulate matter, maximum two-hour average; and
- (iii) No greater than 20 percent opacity of visible emissions, except that 40 percent opacity shall be permitted for not more than two minutes in any hour.

(SO_2 emission limits/requirements for boilers 1, 2, & 3 are listed under the "State Only" portion of this permit and additional SO_2 and NO_X requirements are located in the Acid Rain portion of this permit.)

(b) Emissions from boiler 4 (source 4) shall be limited to:
- (i) 0.20 lb/MMBtu of heat input of SO_2, not to exceed 1,004 lb/hr mass rate;
- (ii) 0.70 lb/MMBtu of heat input of NO_X, not to exceed 3,514 lb/hr mass rate;
- (iii) 0.10 lb/MMBtu of heat input of particulate matter, not to exceed 502 lb/hr mass rate; and
- (iv) No greater than 20 percent opacity of visible emissions, except that 27 percent opacity shall be permitted for not more than one six-minute period per hour.

(Additional SO_2 and NO_X requirements for boiler 4 are located in the Acid Rain portion of this permit.)

(c) Emissions from the outlet of the boiler 4 electrostatic precipitator shall not exceed an hourly opacity standard of 30 percent as measured by a continuous opacity monitoring system.

(F7) BAGHOUSE EMISSIONS (Modified June 15, 2004, removal of Source 12)
[WAQSR Ch 3, Sec 2 & Ch 6, Sec 2, Permits MD-307, OP-267 & MD-883 & 40 CFR 60 Subpart Y]
Emissions of particulate matter and opacity of visible emissions from each baghouse shall be limited as follows:

Source ID #	Source Description	Particulate Emission Limit (lb/hr)	Opacity Limit
11	01 Secondary Crusher Building Transfer Points	2.42	20% except for not more than 6 min/hr of not more than 40%
13	Unit 1 Conveyor Transfer Points & Silo Vent	2.23	20% except for not more than 6 min/hr of not more than 40%
14	Unit 2 Conveyor Transfer Points & Silo Vent	2.74	20% except for not more than 6 min/hr of not more than 40%
15	Unit 3 Conveyor Transfer Points & Silo Vent	2.74	20% except for not more than 6 min/hr of not more than 40%
16*	91 Secondary Crusher Building Transfer Points	1.03	less than 20%
17*	Unit 4 Conveyor Transfer Points & Silo Vent	2.74	less than 20%
18*	02 Secondary Crusher Building Transfer Points	0.02 grains per acf of exhaust not to exceed 0.26 lb/hr	less than 20%
19*	Railcar/Truck Unloading Transfer Points	0.01 grains per acf of exhaust not to exceed 3.50 lb/hr	less than 20%
20*	Overland Conveyor Interface Building Transfer Points	0.01 grains per acf of exhaust not to exceed 0.90 lb/hr	less than 20%
21*	02 Reclaim Tunnel Transfer Points	0.01 grains per acf of exhaust not to exceed 1.29 lb/hr	less than 20%
22*	02A Reclaim Tunnel Transfer Points	0.01 grains per acf of exhaust not to exceed 1.29 lb/hr	less than 20%

*Subject to 40 CFR 60 Subpart Y requirements

(F8) ASH HANDLING FACILITIES [WAQSR Ch 6, Sec 2, Permits OP-177 & OP-267 & Waiver AP-589]

(a) The permittee shall control fly ash bin (Source 26) unloading emissions such that no greater than 20 percent opacity is observed from operations during any period of the unloading activity.

(b) The permittee shall treat all haul roads associated with the ash disposal site (Source 27) with chemical dust suppressants and water at a frequency sufficient to adequately control fugitive dust.

(c) The permittee shall apply water to active portions of the ash stockpile during all hours of bulldozing activity. Such applications shall be made at a rate sufficient to control fugitive dust. All other disturbed acreage shall be treated with chemical dust suppressants and/or water as necessary to control fugitive dust.

(F9) COAL HANDLING FACILITIES [WAQSR Ch 6, Sec 2, Permit OP-267]

(a) The permittee shall operate chemical dust suppression systems at the railcar/truck coal receiving station (Source 19) and at the overland conveyor interface building (Source 20) at all times coal is being received through these stations.

(b) The permittee shall operate, according to the water spray operations plan in Appendix C of this permit, water spray systems during periods of non-freezing weather (whenever temperatures are above 35 °F) to control fugitive dust emissions while the intermediate and radial coal stackers (Source 23) are active.

(F10) COAL STOCKPILES [WAQSR Ch 6, Sec 2, Permit OP-267]

(a) The Jim Bridger plant coal stockpile inventory (Source 24) shall be limited to a maximum of 1.0 million tons of coal at any one time, with the plant annual average tonnage set at no more than 0.831 million tons, as shown in the table below:

Coal Stockpile	Maximum Permitted Capacity (tons)	Permitted Annual Average (tons)
Intermediate	40,000	27,000
Active (Radial Stacker)	180,000	120,000
Ready (Stacker-Reclaimer)	80,000	50,000
Main Surge Pile (Dozer Push from Active or Intermediate Piles)	200,000	134,000
Main Dead Storage	500,000	500,000
Totals	1,000,000	831,000

(b) The permittee shall maintain the dead storage portion of the "Main" coal stockpile in a "dressed and sealed" condition approved by the Division, such that wind erosion emissions are effectively eliminated. Equipment activity on the dead storage portion of the "Main" coal stockpile shall be limited to those times when use of this reserve is necessary. The permittee shall notify the Division by telephone of any contemplated use of the dead storage portion of the "Main" coal stockpile, and follow up such oral reporting with written confirmation of the duration of activity and total coal tonnages moved during the incident.

(F11) DIESEL-FIRED EMERGENCY EQUIPMENT [WAQSR Ch 3, Sec 2]
Visible emissions from the emergency diesel-fired generator engines and emergency diesel-fired fire pump engine shall be limited to 30 percent opacity except for periods not exceeding ten consecutive seconds as specified in WAQSR Chapter 3, Section 2(d). This limitation shall not apply during a reasonable period of warmup following a cold start or where undergoing repairs and adjustment following a malfunction.

(F12) OPERATION AND MAINTENANCE PLAN
[WAQSR Ch 6, Sec 3(h)(i)(A) and Ch 6, Sec 2 Permit MD-883] (Modified June 15, 2004)

(a) The permittee shall conduct preventative maintenance and inspections on the water/chemical spray dust suppression systems and diesel-fired emergency equipment in accordance with the Operation and Maintenance Plan in Appendix D of this permit.

(b) The permittee shall conduct daily inspections of the dry fog system and the preventative maintenance will be completed as represented in the Maintenance Plan in Appendix D of this permit. The preventative maintenance plan may be revised upon request of the permittee, by administratively amending this permit, after review and approval by the Division of the revised plan.

(F13) USED OIL WASTE BURNING [WAQSR Ch 6, Sec 2(k) Waiver AP-2P2]
The permittee may burn approximately 45,000 gallons per year of plant generated on-specification waste oil and approximately 1200 gallons per year of hazardous waste in Units 1 and 3. All provisions of 40 CFR 266.108 shall be followed. (40 CFR 266.108 is attached as Appendix H).

(F14) DRY FOG AND DUST EXTRACTOR SYSTEM
[WAQSR Ch 6, Sec 2(h) and Ch 6, Sec 2 Permit MD-883] (Modified June 15, 2004)
If construction of the dry fog/dust extractor systems (sources 13, 14, 15, 17 and 20) is discontinued for a period of 24 months or more, the permit to construct the remaining sources shall become invalid. The Administrator may extend the period based on a satisfactory justification of the requested extension.

(F15) BAGHOUSE REPLACEMENT [WAQSR Ch 6, Sec 2 Permit MD-883] (Modified June 15, 2004)
Units 1-4 coal gallery baghouses (sources 13, 14, 15 and 17) shall be replaced with dust extractors with the exhausts vented in the coal gallery. The overland conveyor interface building transfer points baghouse (Source 20) shall be replaced with a dry fog system.

Testing Requirements

(F16) INITIAL PERFORMANCE TESTING [40 CFR Part 60 Subpart Y and WAQSR Ch 5, Sec 2; Ch 6, Sec 2(j); and Ch 6, Sec 2 Permit MD-883] (Modified June 15, 2004)

Performance tests shall be conducted on the unit 4 conveyor transfer points and silo vent (source 17) and the overland conveyor interface building transfer points (source 20) after startup of the associated dust extractor system (for source 17) and the associated dry fog system (for source 20).

(a) The permittee shall demonstrate compliance with the requirements of 40 CFR Part 60, Subpart Y, §60.252.

(b) Testing shall be conducted as specified in §60.254, WAQSR Ch 5 Sec 2, and Ch 6 Sec 2(j), within 30 days of achieving maximum design rate but not later than 90 days following initial startup of each system.

(c) The permittee shall provide the Division with 15 days prior notice of the test date.

(F17) BOILER STACK PARTICULATE EMISSIONS TESTING [WAQSR Ch 6, Sec 3 (h)(i)(C)(I)]

(a) The permittee shall measure particulate emissions from boiler 4 stack at least annually for comparison with the emission limits specified in condition F6 of this permit. Particulate emissions shall be measured in lb/MMBtu and lb/hr using the procedure specified in 40 CFR 60, Subpart D, §60.46(b) and Methods 1-5.

(b) The permittee shall measure particulate emissions from boilers 1, 2, and 3 at least annually for comparison with the emission limits specified in condition F6 of this permit. Methods 1-4 and 5 shall be used to measure particulate emissions.

(c) Testing shall be conducted in accordance with WAQSR Chapter 5, Section 2 (h).

(F18) ADDITIONAL TESTING [W.S. 35-11-110 & 40 CFR 60 Subpart D] (Modified June 15, 2004)

(a) The Division reserves the right to require testing as provided under condition G1 of this permit. Should testing be required:

(i) For visible emissions from the dry fog and dust extractor systems, 40 CFR Part 60, Appendix A, Method 22 shall be used. Compliance shall be based on a six (6) minute reading with an observation taken every fifteen (15) seconds.

(ii) For visible emissions from other sources, Method 9 shall be used.

(iii) For particulate emissions, Methods 1-4 and 5 shall be used.

(iv) For NO_X emissions sources, Methods 1-4 and 7 or 7E shall be used.

(v) For SO_2 emissions, Methods 1-4 and 6 or 6C shall be used.

(vi) For boiler 4 particulate, SO_2, NO_X, and visible emissions shall be measured as specified in 40 CFR 60, Subpart D, §60.46(b).

(vii) For other pollutants, methods approved by the Administrator prior to testing shall be used to measure emissions.

(b) Unless otherwise specified, testing shall be conducted in accordance with WAQSR Ch 5, Sec 2(h).

Monitoring Requirements

(F19) BOILER STACK EMISSIONS MONITORING

[WAQSR Ch 6, Sec 3 (h)(i)(C)(I) & Ch 6, Sec 2, Permit OP-228, Ch 7, Sec 3(c)(ii), and 40 CFR Part 75]

(a) For particulate matter emissions from boilers 1, 2, 3, and 4;

(i) The permittee shall adhere to the compliance assurance monitoring (CAM) plan, attached as Appendix F of this permit, for particulate emissions and shall conduct monitoring as follows:

(A) The permittee shall measure opacity with the continuous opacity monitoring system specified in the CAM plan for each unit.

(B) An indicator measurement outside the range specified in the CAM plan shall prompt immediate inspection and corrective actions.

(C) The permittee shall perform the testing for particulate emissions as required by condition F17 at least annually for comparison with the emission limits specified in condition F6 of this permit, and to verify the continued relationship between opacity and particulate emissions.

(ii) The permittee shall follow all other applicable requirements under conditions CAM-1 through CAM-4 of this permit.

(b) (i) The SO_2 and either oxygen or carbon dioxide emissions monitoring requirements of 40 CFR Part 75 shall serve as periodic monitoring for SO_2 emissions from boilers 1, 2, 3, and 4.

(ii) Additional SO_2 emissions monitoring is described in condition P60-D2 and S-6 of this permit.

(c) The NO_X emissions monitoring requirements of 40 CFR Part 75 shall serve as periodic monitoring for emissions of this pollutant.

(d) (i) The permittee shall calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions from boilers 1, 2, and 3 as required by 40 CFR Part 75.

(ii) For boiler 4, the permittee shall operate, maintain, and calibrate a continuous opacity monitoring system located on the outlet of the electrostatic precipitator for comparison with the limit specified in condition F6(c) of this permit. Except as specified by this permit condition, operation of the monitoring system shall be in accordance with WAQSR Chapter 5, Section 2 (j).

(F20) BAGHOUSE EMISSIONS MONITORING

[WAQSR Ch 6, Sec 3 (h)(i)(C)(I) and Ch 7, Sec 3 (c)(ii)] (Modified June 15, 2004)

(a) The permittee shall adhere to the compliance assurance monitoring (CAM) plan, attached as Appendix F of this permit, for particulate emissions from each source listed in the table under condition F7 of this permit, and shall conduct monitoring as follows:

(i) The permittee shall conduct, at minimum once daily, visual observations of each baghouse controlled unit to determine the presence of visible emissions.

(ii) The visual observations shall be conducted by a person who is educated on the procedures for determining the presence of visible emissions for Method 22 observations.

(iii) Observation of any visible emissions from any of these units shall prompt immediate inspection and, if necessary, corrective actions and reporting.

(iv) The permittee shall follow all other applicable requirements under conditions CAM-1 through CAM-4 of this permit.

(b) If a dry fog or dust extractor system referenced in condition F5 of this permit is used instead of a baghouse for a full calendar day, then that shall be so noted in lieu of the visual observations required by paragraph (a) of this condition. The permittee shall monitor the source as described in condition F21 of this permit.

(c) Upon permanent replacement of a baghouse described in paragraph (b) above by a dry fog or dust extractor system, the permittee shall no longer be subject to the requirements in paragraph (a) for that source. The permittee shall then monitor the source as described in condition F21 of this permit.

(F21) DRY FOG/DUST EXTRACTOR EMISSIONS MONITORING

[WAQSR Ch 6, Sec 2 Permit MD-883 and Ch 6, Sec 3(h)(i)(C)(I)] (Modified June 15, 2004)

(a) The permittee shall conduct, at a minimum, weekly visual observations of the dry fog system on the overland conveyor interface building (source 20), to determined the presence of visible emissions. This includes the coal transfer operations from the overland conveyor to the 01A and 01W conveyors.

(b) The permittee shall conduct, at a minimum, weekly visual observations of the dust extractor systems (sources 12, 13, 14, 15 and 17) to determine the presence of visible emissions. This includes the units 1-3 distribution bin transfer points, and units 1-4 conveyor transfer points and silo vents.

(c) The visual observations shall be conducted in accordance with 40 CFR 60, Appendix A, Method 22, for a minimum of 6 minutes at each system.

(F22) COAL STACKER OPACITY MONITORING [WAQSR Ch 6, Sec 3 (h)(i)(C)(I)]

The permittee shall conduct quarterly Method 9 observations of visible emissions from each of the coal stackers (Source 23) to assure compliance with the opacity limit under condition F5 of this permit.

(F23) FLY ASH BIN OPACITY MONITORING [WAQSR Ch 6, Sec 3 (h)(i)(C)(I)]

The permittee shall conduct quarterly Method 9 observations of visible emissions from the fly ash bin (Source 26) to assure compliance with the opacity limit under condition F8(a) of this permit.

(F24) DIESEL-FIRED EMERGENCY EQUIPMENT MONITORING [WAQSR Ch 6, Sec 3 (h)(i)(C)(I)]

(a) The permittee shall conduct observations of visible emissions from the emergency diesel-fired generator engines and emergency diesel-fired fire pump engine during periodic availability assurance tests of these sources, no less than semi-annually, to assure compliance with the opacity limit under condition F11 of this permit and to identify maintenance needs. The visual observations shall be conducted by personnel certified to perform Method 9 observations.

(b) Observation of visible emissions which exceed the limit specified in condition F11 shall trigger immediate corrective action to bring the unit into compliance with condition F11 of this permit.

(F25) AMBIENT MONITORING NETWORK [WAQSR Ch 6, Sec 2, Permit OP-267]

The permittee shall operate an approved ambient particulate monitoring network at sites acceptable to the Division. PM_{10} and total suspended particulate monitoring conducted at these sites shall comply with all requirements of 40 CFR Parts 50 and 58.

Recordkeeping Requirements

(F26) TEST RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)] (Modified June 15, 2004)

(a) For any testing required by the Division under conditions F17 and F18, other than Method 9 or Method 22 observations, the permittee shall record, as applicable:

(i) The date, place, and time of sampling or measurements;

(ii) The date(s) the analyses were performed;

(iii) The company or entity that performed the analyses;

(iv) The analytical techniques or methods used;

(v) The results of such analyses; and

(vi) The operating conditions as they existed at the time of sampling or measurement.

(b) For any Method 9 observations required by the Division under condition F16 and F18, 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 F18, the permittee shall keep field records in accordance with Sections 11.2 and 11.5 of Method 22.

(d) The permittee shall retain on-site at the facility the record 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.

(F27) BOILER STACK CONTINUOUS EMISSION AND OPACITY MONITORING RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II) & 40 CFR 60 Subpart D]

(a) For boilers 1, 2, and 3, the opacity, SO_2, and NO_X emissions recordkeeping provisions of 40 CFR Part 75, Subpart F are sufficient to meet the recordkeeping requirements of WAQSR Chapter 6, Section 3 (h)(i)(C)(II).

(b) For boiler 4, recordkeeping requirements for the continuous NO_X and SO_2 emissions and opacity monitoring required under condition F19 of this permit are described under condition P60-D3.

(c) The permittee shall retain on-site at the facility all records kept in accordance with this condition for a period of at least five years from the date such records are generated.

(F28) VISIBLE EMISSIONS MONITORING RECORDS [WAQSR Ch 6, Sec 2 Permit MD-883 and Ch 6, Sec 3(h)(i)(C)(II)] (Modified June 15, 2004)

(a) For the daily visible emissions monitoring required under condition F20, weekly visible emissions monitoring required under condition F21, and the visible emissions monitoring performed during periodic availability assurance tests under condition F24(a), the permittee shall record, as applicable, the following:

(i) The date, place, and time of the observation;

(ii) The company or entity that performed the observation;

(iii) The observation techniques or methods used;

(iv) The observation results;

(v) The operating conditions as they existed at the time of the observation; and

(vi) Any corrective actions taken upon observing visible emissions or upon detecting noncompliance with opacity limitations.

(b) (i) For the Method 9 visible emissions monitoring required under conditions F22 and F23 of this permit, the permittee shall keep field records in accordance with Section 2.2 of Method 9 and record any corrective actions taken upon detecting noncompliance with opacity limits.

(ii) For the Method 22 observations required by the Division under condition F21, the permittee shall keep field records in accordance with Sections 11.2 and 11.5 of Method 22.

(c) The permittee shall record the date that each of the baghouses (sources 13, 14, 15, 17 and 20) is permanently replaced by a dry fog or dust extractor system as described in condition F20(c) of this permit.

(d) The permittee shall retain on-site at the facility records of observations and any corrective actions taken for a period of at least five years from the date such records are generated.

(F29) ADDITIONAL CAM PARTICULATE EMISSIONS RECORDS [WAQSR Ch 7, Sec 3(i)(ii)]

(a) For the CAM the permittee shall also maintain records of 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.

(F30) MAINTENANCE RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]

(a) The permittee shall maintain records of all inspection activities and all corrective and preventative maintenance performed on the dust suppression systems at the railcar/truck coal receiving station (Source 19), the overland conveyor interface building (Source 20), the coal stackers (Source 23), and diesel-fired emergency equipment.

(b) The records shall include, as applicable:

(i) The activity performed;

(ii) The date, place, and time the activity was 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 in Appendix D.

(c) The permittee shall retain on-site at the facility all records kept in accordance with this condition for a period of at least five years from the date such records are generated.

(F31) COAL STOCKPILE RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]

(a) The permittee shall maintain monthly summaries of increases or decreases in the coal stockpile inventory (Source 24) such that compliance with the inventory limits in condition F10 of this permit may be assessed.

(b) The records shall be retained on-site at the facility for a period of at least five years from the date such records are generated.

(F32) AMBIENT MONITORING RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]

(a) The permittee shall maintain records of the data generated by the ambient monitoring network such that compliance with condition F25 of this permit may be assessed.

(b) The permittee shall retain on-site at the facility all monitoring records kept in accordance with this condition for a period of at least five years from the date such records are generated.

(F33) USED OIL WASTE BURNING RECORDS [WAQSR Ch 6, Sec 2 (k) Waiver AP-2P2]

(a) The permittee shall keep records noting time, date, and amount of used oil and/or hazardous waste burned in accordance with condition F13 of this permit and 40 CFR 266.108(e).

(b) The permittee shall retain on-site at the facility all monitoring records kept in accordance with this condition for a period of at least five years from the date such records are generated.

Reporting Requirements

(F34) NOTIFICATION OF START-UP [WAQSR Ch 6, Sec 2 Permit MD-883] (Modified June 15, 2004)
Written notification of the actual start-up date of each dry fog/dust extractor system is required within 15 days of start-up.

(F35) INITIAL PERFORMANCE TESTING [WAQSR Ch 6, Sec 2(j)] (Modified June 15, 2004)
Notification of the date of testing required by condition F16 shall be provided to the Division 15 days prior to testing. Results shall be submitted to the Division within 30 days of completion.

(F36) TEST REPORTS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)]
The permittee shall report the results of any testing required by the Division under conditions F17 and F18 within 45 days of conducting the tests. The reports shall include applicable information as specified under condition F26 and shall be submitted to the Division in accordance with condition G4 of this permit.

(F37) EXCESS EMISSIONS AND MONITORING SYSTEM PERFORMANCE REPORTS FOR OPACITY AND NO_X EMISSIONS FROM BOILERS 1, 2, AND 3 [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)]

(a) For boilers 1, 2, and 3, the permittee shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in paragraphs (b) and (c) 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, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(ii) Specific identification of each period of excess emissions that occurs during start-ups, shutdowns, malfunctions of boilers 1, 2, and 3. The nature and cause of any malfunction (if known), 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) have not been in operative, 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) For the purpose of reporting under this condition, NO_X excess emissions are defined as any fixed three-hour period during which the average emissions of NO_X from boilers 1, 2, or 3 exceed 0.70 lb/MMBtu of heat input.

(c) For the purpose of reporting under this condition, opacity excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent.

(d) Notwithstanding the frequency of reporting requirements specified in paragraph (a) of this condition, a permittee who is required to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual as described in WAQSR Chapter 5, Section 2 (g)(iv). Any reduction in

reporting frequency requires a significant modification to this operating permit pursuant to WAQSR Chapter 6, Section 3(d)(vi)(C).

(e) The reports shall be submitted to the Division in accordance with condition G4 of this permit.

(F38) MONITORING REPORTS [WAQSR Ch 6, Sec 3(h)(i)(C)(III) and Ch 7, Sec 3(i)(i)] (Modified June 15, 2004)

(a) The following shall be reported to the Division by January 31 and July 31 each year:

(i) Summary results of the emissions monitoring required under conditions F20, F21, F22, F23 and F24 of this permit.

(ii) Additionally, the results of Compliance Assurance Monitoring (CAM) required under conditions F19 and F20 of this permit for the coal fired boilers and 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.

(F39) MAINTENANCE REPORTS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)] (Modified June 15 2004)

(a) The permittee shall report to the Division by January 31 and July 31 each year whether the permittee has adhered to the Operation and Maintenance Plan (Appendix D) for the water/chemical spray dust suppression systems, diesel-fired emergency equipment, and the dry fog system as required by condition F12 of this permit.

(b) Any deviations from the Operation and Maintenance Plan must be clearly identified in each report.

(c) If the permittee has adhered to the Operation and Maintenance Plan during the reporting period, this shall be stated in the report.

(d) The reports shall be submitted to the Division in accordance with condition G4 of this permit.

(F40) AMBIENT MONITORING REPORTS [WAQSR Ch 6, Sec 2, Permit OP-267]

A summary of the ambient monitoring data retained in accordance with condition F32 of this permit shall be submitted to the Division in accordance with condition G4 within 60 days of the end of each calendar quarter.

(F41) DUST CONTROL REPORTS [WAQSR Ch 6, Sec 2, Permit OP-267]

(a) The permittee shall submit by the end of February each calendar year an annual dust control report for Division approval. The annual report shall contain the following:

(i) A description of what dust control measures are planned for the coming year; and

(ii) A report of what dust control measures were actually completed during the past year.

(b) Specific elements of the report shall include:

(i) A map of all trafficked areas and roads associated with the Jim Bridger Power Plant grounds, indicating which areas are already paved, which areas will be paved during the coming year, and which unpaved areas will receive treatments with dust suppressant chemicals in the coming year;

(ii) A description of what dust suppressant will be used an how it will be applied (application rate, application frequency, dilution rate, special application procedures, scarification, etc.);

(iii) A list of the number and capacity of water trucks dedicated to road dust control;

(iv) A quantification of how much dust suppressant (gallons, tons) was applied the previous year, and when and where it was applied; and

(v) A quantification of how much watering was accomplished the previous year (MM gallons).

(c) The permittee shall report the monthly stockpiles sizes and summaries of increases or decreases in the coal stockpile inventory.

(d) The annual report shall be submitted to the Division in accordance with condition G4 of this permit.

(F42) REPORTING EXCESS EMISSIONS & DEVIATIONS FROM PERMIT REQUIREMENTS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)]

(a) For boilers 1, 2, and 3, reporting requirements for excess SO_2 emissions are described under condition S-10 of this permit.

(b) For boiler 4, reporting requirements for excess visible, NO_X, and SO_2 emissions are described under condition P60-D4 of this permit.

(c) 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.

(d) Emissions which exceed limits specified in this permit shall be reported annually with the emission inventory unless specifically superseded by condition G17, condition G21, 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 abnormal conditions or equipment malfunction shall be reported as specified in condition G21.)

(e) 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.

Sulfur Dioxide Milestone Inventory (Modified September 6, 2005)

(F43) Sulfur Dioxide Emissions Inventory Requirements [WAQSR Ch 14, Sec 3]

(a) The permittee shall report SO2 emissions annually as required by WAQSR Ch 14, Sec 3. SO_2 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) Sulfur Dioxide Emission Inventory Records.

(i) The permittee shall maintain all records used in the calculation of SO_2 emissions, including but not limited to the following:

(A) Amount of fuel consumed;

(B) Percent sulfur content of fuel and how the content was determined;

(C) Quantity of product produced;

(D) Emissions monitoring data;

(E) Operating data; and

(F) How the emissions are calculated, including monitoring/estimation methodology with a demonstration that the selected methodology is acceptable under Ch 14, Sec 3.

(ii) 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 SO_2.

(iii) The permittee shall retain all records and support information for compliance with this condition 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.

(c) Sulfur Dioxide Emission Inventory Reports.

(i) The permittee shall report calendar year SO_2 emissions by April 15th of the following year. The inventory shall be submitted in the format specified by the Division.

(ii) Emissions from startup, shutdown, and upset conditions shall be included in the inventory.

(iii) If the permittee uses a different emission monitoring or calculation method than was used to report SO_2 emissions in 1998, the permittee shall adjust reported SO_2 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.

(iv) For acid rain sources, the permittee shall submit a summary report of annual SO_2 emissions that were reported to the EPA under 40 CFR Part 75.

(v) The permittee shall use 40 CFR Part 75 methodology for reporting emissions for all sources subject to the federal acid rain program.

(vi) 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 SO_2 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.

(vii) The annual reports shall be submitted in accordance with condition G4 of this permit.

WAQSR CHAPTER 5, SECTION 2 NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND 40 CFR 60 SUBPART D REQUIREMENTS

(Subpart D is provided in Appendix A)

(P60-D1) EMISSIONS STANDARDS [WAQSR Ch 6, Sec 2, Permit OP-228]

(a) For boiler 4, compliance with the emission limit specified in condition F6(b)(i) of this permit is considered compliance with the applicable SO_2 emission standard of §60.43(a)(2).

(b) For boiler 4, compliance with the emission limit specified in condition F6(b)(ii) of this permit is considered compliance with the applicable NO_X emission standard of §60.44(a)(3).

(c) For boiler 4, compliance with the emission limit specified in condition F6(b)(iii) of this permit is considered compliance with the applicable particulate emission standard of §60.42(a)(1).

(d) For boiler 4, compliance with the opacity limit specified in condition F6(b)(iv) of this permit is considered compliance with the applicable opacity standard of §60.42(a)(2).

(P60-D2) EMISSIONS MONITORING [WAQSR Ch 5, Sec 2 (j)(v) and 40 CFR 60 Subpart D]

(a) For boiler 4, compliance with the monitoring requirements of 40 CFR Part 75 for SO_2 emissions, NO_X emissions, and either oxygen or carbon dioxide is considered compliance with the monitoring requirements of §60.45(a) for these pollutants.

(b) For boiler 4, compliance with the opacity monitoring requirement in condition F19(d) of this permit is considered compliance with the opacity monitoring requirement of §60.45(a).

(c) Except for system breakdown, repairs, calibration checks, and zero and span adjustments required under WAQSR Chapter 5, Section 2(j)(iv), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(i) All continuous monitoring systems referenced by WAQSR Chapter 5, Section 2(j)(iii)(A) and (B) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive ten-second period and one cycle of data recording for each successive six-minute period.

(ii) All continuous monitoring systems referenced by WAQSR Chapter 5, Section 2(j)(iii)(A) and (B) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15 minute period.

(iii) The continuous monitoring systems need not be operated when the emission source is not in operation and no pollutants are being emitted from the stack.

(d) For boiler 4, the SO_2 pollutant and either oxygen or carbon dioxide concentrations monitored under 40 CFR Part 75 may be used to calculate SO_2 emissions in lb/MMBtu for excess emissions reporting under condition P60-D4 of this permit.

(P60-D3) CONTINUOUS EMISSION AND OPACITY MONITORING RECORDS [WAQSR Ch 5, Sec 2 (g)(ii) & (g)(v)]

(a) For boiler 4, the NO_X, SO_2, and opacity recordkeeping provisions of 40 CFR Part 75, Subpart F are sufficient to meet the recordkeeping requirements of WAQSR Ch 5, Sec 2 (g)(ii) & (g)(v).

(b) The permittee shall retain on-site at the facility all records kept in accordance with this condition for a period of at least five years from the date such records are generated.

(P60-D4) EXCESS EMISSIONS AND MONITORING SYSTEM PERFORMANCE REPORTS [WAQSR Ch 6, Sec 2, Permit OP-228 & Ch 5, Sec 2 (g)(iii) & (g)(iv)]

(a) For boiler 4, 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, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(ii) Specific identification of each period of excess emissions that occurs during start-ups, shutdowns, malfunctions of boiler 4. The nature and cause of any malfunction (if known), 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) have not been in operative, 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) For the purpose of reporting under this condition, excess emissions from boiler 4 are defined as:

(i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of NO_X expressed as nitrogen dioxide as measured by a continuous monitoring system exceeds the emission level of 0.70 lb/MMBtu of heat input or 3514 pounds per hour as measured by the continuous emission monitoring system.

(ii) Any fixed two-hour period during which the average emission (arithmetic average of two contiguous one-hour periods) of SO_2 as measured by a continuous monitoring system exceeds the emissions level of 0.20 lb/MMBtu of heat input or 1004 pounds per hour as measured by the continuous emission monitoring system. Compliance with the SO_2 emission limits on a two-hour fixed average basis is considered compliance with the emission limits on a three-hour average basis as specified under §60.45(g)(2)(i).

(iii) Any one-hour period during which the average opacity of emissions as measured by a continuous opacity monitoring system located on the outlet of the boiler 4 electrostatic precipitator exceeds 30 percent.

(c) Notwithstanding the frequency of reporting requirements specified in paragraph (a) of this condition, a permittee who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual as described in WAQSR Chapter 5, Section 2(g)(iv). Any reduction in reporting frequency requires a significant modification to this operating permit pursuant to WAQSR Chapter 6, Section 3(d)(vi)(C).

(d) The reports shall be submitted to the Division in accordance with condition G4 of this permit.

(P60-D5) GOOD AIR POLLUTION CONTROL PRACTICE [WAQSR Ch 5, Sec 2 (i)(iv)]

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate boiler 4, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

WAQSR CHAPTER 5, SECTION 2 NEW SOURCE PERFORMANCE STANDARDS (NSPS) AND 40 CFR 60 SUBPART Y REQUIREMENTS

(Subpart Y is provided in Appendix B)

(P60-Y1) SUBPART Y REQUIREMENTS [40 CFR 60 Subpart Y and WAQSR Ch 6, Sec 2 Permit MD-883] (Modified June 15, 2004)

The permittee shall meet all requirements of 40 CFR 60 Subpart Y, as they apply to coal handling facilities.

(a) The permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, as defined in §60.251, gases which exhibit 20 percent opacity or greater as specified in §60.252(c). This includes the following:

(i) The Unit 4 conveyor transfer point and silo vent (source 17);

(ii) The Overland conveyor interface building transfer points (source 20); and

(iii) The coal handling sources listed in condition F7 of this permit.

(b) If emissions testing is required to demonstrate compliance with this subpart, the permittee shall follow all test methods and procedures specified in §60.254.

(P60-Y2) RECORDKEEPING [WAQSR Ch 5, Sec 2 (g)(ii) and (g)(v)]

(a) The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the coal handling facilities and any malfunction of the air pollution control equipment. These records shall be retained on-site at the facility for a period of at least five years from the date of such occurrences.

(b) The permittee shall maintain records of all measurements, reports, and other information required by the NSPS conditions of this permit recorded in a permanent form suitable for inspection. These records shall be retained on-site at the facility for a period of at least five years from the date such records are generated.

(P60-Y3) GOOD AIR POLLUTION CONTROL PRACTICE [WAQSR Ch 5, Sec 2 (i)(iv)]

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the coal handling facilities, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

WAQSR CHAPTER 7, SECTION 3
COMPLIANCE ASSURANCE MONITORING (CAM) REQUIREMENTS (Modified June 15, 2004)

(CAM-1) COMPLIANCE ASSURANCE MONITORING REQUIREMENTS [WAQSR Ch 7, Sec 3 (b)and (c)]

The permittee shall meet all CAM requirements of WAQSR Chapter 7, Section 3 as they apply to boilers 1, 2, 3, and 4 (units 1, 2, 3, and 4) and the baghouse controlled sources (units 11, 13- 22). Compliance with the source specific monitoring, recordkeeping, and reporting requirements of this permit meets the monitoring, recordkeeping, and reporting requirements of WAQSR Chapter 7, Section 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 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 3
NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS)
40 CFR 63 SUBPART ZZZZ REQUIREMENTS

(Subpart ZZZZ is provided in Appendix I) (Modified September 6, 2005)

(P63-ZZZZ1) EMISSION STANDARDS [40 CFR 63 Subpart ZZZZ and WAQSR Ch 5, Sec 3]

(a) The permittee shall meet all requirements of 40 CFR 63 Subpart ZZZZ and WAQSR Ch 5, Sec 3 as they apply to reciprocating internal combustion engines (RICE). An affected source is any existing, new or reconstructed stationary RICE with a site-rating of more than 500 brake horsepower located at a major stationary source of HAP emissions as specified in §63.6590. Sources at this facility are the two existing 979 hp diesel emergency generator engines.

(b) Existing RICE of the following types do not have to meet the requirements of Subpart ZZZZ and of WAQSR Ch 5, Sec 3; no initial notification is necessary.

- **(i) Spark ignition 2 stroke lean burn stationary RICE;**
- **(ii) Spark ignition 4 stroke lean burn stationary RICE;**
- **(iii) Compression ignition stationary RICE;**
- **(iv) Emergency stationary RICE; or**
- **(v) Limited use stationary RICE.**

COMPLIANCE CERTIFICATION AND SCHEDULE

Compliance Certification [WAQSR Ch 6, Sec 3 (h)(iii)(E)] (Modified June 15, 2004) **(Modified September 6, 2005)**

(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 NO_X emissions from boilers 1, 2, 3, and 4, the permittee shall assess compliance with conditions F6 (a)(i) and F6 (b)(ii) of this permit by conducting monitoring required under 40 CFR Part 75.

(ii) For particulate emissions from boilers 1, 2, 3, and 4, the permittee shall assess compliance with conditions F6 (a)(ii) and F6 (b)(iii) of this permit by conducting monitoring required under condition F19.

(iii) For opacity of emissions from boilers 1, 2, and 3, the permittee shall assess compliance with condition F6 (a)(iii) of this permit by conducting monitoring required under condition F19 (d)(i).

(iv) For opacity of emissions from boiler 4, the permittee shall assess compliance with conditions F6 (b)(iv) and F6 (c) of this permit by conducting monitoring required under condition F19 (d)(ii).

(v) For SO_2 emissions from boiler 4, the permittee shall assess compliance with condition F6 (b)(i) of this permit by conducting monitoring required under condition P60-D2.

(vi) For particulate and visible emissions from baghouses (Sources 11 and 13 through 22), the permittee shall assess compliance with the limits listed under condition F7 of this permit by conducting monitoring required under condition F20.

(vii) For visible emissions from the dry fog and dust extractor systems, the permittee shall assess compliance with condition F5(a) and (b) of this permit by conducting the testing required by condition F16 and the monitoring required by condition F21.

(viii) For visible emissions from the fly ash bin (Source 26), the permittee shall assess compliance with condition F8 (a) of this permit by conducting monitoring required under condition F23.

(ix) For fugitive dust emissions from unpaved plant trafficked areas, from haul roads associated with the ash disposal site (Source 27), and from the ash stockpile, the permittee shall assess compliance with conditions F4, F8 (b) and F8 (c) of this permit by reviewing dust control reports submitted in accordance with condition F42.

(x) For fugitive emissions from the railcar/truck coal receiving station (Source 19), the overland conveyor interface building (Source 20), and the intermediate and radial coal stackers (Source 23), the permittee shall assess compliance with water and/or chemical spray dust suppression requirements under conditions F9 (a) and F9 (b) of this permit by reviewing maintenance and inspection records kept in accordance with condition F30.

(xi) For coal stockpile inventory (Source 24), the permittee shall assess compliance with the tonnage limits under condition F10 (a) of this permit by reviewing coal stockpile records kept in accordance with condition F31.

(xii) For fugitive emissions control requirements for the "Main" coal stockpile, the permittee shall assess compliance with the control requirements under condition F10 (b) of this permit by reviewing dust control reports submitted in accordance with condition F42.

(xiii) For visible emissions from diesel-fired emergency equipment, the permittee shall assess compliance with condition F11 of this permit by conducting monitoring required under condition F24 and by reviewing maintenance and inspection records kept in accordance with condition F30.

(xiv) For preventative maintenance and inspections required to be conducted on facility equipment, the permittee shall assess compliance with condition F12 by reviewing maintenance records kept in accordance with condition F30.

(xv) For ambient monitoring, the permittee shall assess compliance with condition F25 of this permit by reviewing records kept in accordance with condition F32.

(xvi) For SO_2 emissions from boilers 1, 2, and 3 (Sources 1, 2, and 3), the permittee shall assess compliance with the limit under condition S4 of this permit by conducting monitoring required under condition S6. (This is a state only requirement.)

(xvii) **For the sulfur dioxide emissions inventory, the permittee shall assess compliance with condition F43(a) of this permit by reviewing records kept in accordance with condition F43(b) and verifying reports were submitted in accordance with condition F43(c).**

(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, One Denver Place, 999 18th Street - Suite 300, Denver, CO 80202-2466.

(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)]

(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 (Modified June 15, 2004)

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 (8ENF-T)
U.S. EPA - Region VIII
999 18th Street - Suite 300
Denver, CO 80202-2466.

(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
999 18th Street - Suite 300
Denver, CO 80202

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) There are no emissions trading provisions 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(l)]

(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(l)(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.

Carbon Monoxide: [WAQSR Ch 3, Sec 5]

(G18) 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.

Open Burning Restrictions: [WAQSR Ch 10, Sec 2] (Modified September 6, 2005)

(G19) 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.

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

(G20) 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.

Abnormal Conditions and Equipment Malfunction: [WAQSR Ch 1, Sec 5]

(G21) Emissions in excess of established regulation limits as a direct result of malfunction or abnormal conditions or breakdown of a process, control or related operating equipment beyond the control of the person or firm owning or operating such equipment shall not be deemed to be in violation of such regulations, if the Division is advised of the circumstances within 24 hours of such malfunction and a corrective program acceptable to the Division is furnished.

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 Chapter 3, Section 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.

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

(G23) 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.

Stratospheric Ozone Protection Requirements: [40 CFR Part 82]

(G24) 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.

Sulfur Dioxide Emission Trading and Inventory Program [WAQSR Ch 14] (Modified September 6, 2005)

(G25) Any BART (Best Available Retrofit Technology) eligible facility, or facility which has actual emissions of SO_2 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).

STATE ONLY PERMIT CONDITIONS

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 avg. concentration with not more than one exceedance per year	
$PM_{2.5}$ particulate matter	15 micrograms per cubic meter	annual arithmetic mean	2 (b)
	65 micrograms per cubic meter	98^{th} percentile 24-hour average concentration	
Nitrogen dioxide	100 micrograms per cubic meter	annual arithmetic mean	3
Sulfur oxides	60 micrograms per cubic meter	annual arithmetic mean	4
	260 micrograms per cubic meter	max 24-hr concentration with not more than one exceedance per year	
	1300 micrograms per cubic meter	max 3-hr concentration with not more than one exceedance per 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	0.08 parts per million	daily maximum 8-hour average	6
	0.12 parts per million	one hour average	
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	1.5 micrograms per cubic meter	maximum arithmetic mean averaged over a calendar quarter	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]

Source-Specific Permit Conditions

(S4) SO_2 EMISSIONS FROM BOILERS 1, 2, & 3 [WAQSR Ch 3, Sec 4 (d)]
SO_2 emissions from boilers 1, 2, and 3 shall be limited to 0.3 lb/MMBtu of heat input calculated on the basis of two-hour averages.

Testing Requirements

(S5) SO_2 EMISSIONS TESTING FOR BOILERS 1, 2, & 3 [W.S. 35-11-110]

(a) The Division reserves the right to require SO_2 emissions testing of boilers 1, 2, and 3 as provided under condition G1 of this permit. Should testing be required Method 6 or an alternative method approved by the Administrator shall be used.

(b) Testing shall be conducted in accordance with WAQSR Chapter 5, Section 2 (h).

Monitoring Requirements

(S6) SO_2 EMISSIONS MONITORING FOR BOILERS 1, 2, & 3 [WAQSR Ch 6, Sec 3 (h)(i)(C)(I)]
The SO_2 and either oxygen or carbon dioxide emissions monitoring requirements of 40 CFR Part 75 shall serve as periodic monitoring for SO_2 emissions from boilers 1, 2, and 3. The SO_2 pollutant and either oxygen or carbon dioxide concentrations monitored under 40 CFR Part 75 may be used to calculate SO_2 emissions in lb/MMBtu for excess emissions reporting under condition S10 of this permit.

Recordkeeping Requirements

(S7) SO_2 EMISSIONS TEST RECORDS FOR BOILERS 1, 2, & 3 [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]

(a) For any testing required by the Division under condition S5 of this permit, the permittee shall record, as applicable:

(i) The date, place, and time of sampling or measurements;

(ii) The date(s) the analyses were performed;

(iii) The company or entity that performed the analysis;

(iv) The results of such analyses; and

(v) The operating conditions as they existed at the time of sampling or measurement.

(b) The permittee shall retain on-site at the facility the record of each test and support information for a period of at least five years from the date of the test.

(S8) SO_2 EMISSIONS MONITORING RECORDS FOR BOILERS 1, 2, & 3 [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]

(a) The SO_2 emissions recordkeeping provisions of 40 CFR Part 75, Subpart F are sufficient to meet the recordkeeping requirements of WAQSR Chapter 6, Section 3(h)(i)(C)(II) for boilers 1, 2, and 3.

(b) The permittee shall retain on-site at the facility all records kept in accordance with this condition for a period of at least five years from the date such records are generated.

Reporting Requirements

(S9) SO_2 EMISSIONS TEST REPORTS FOR BOILERS 1, 2, & 3 [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)] The permittee shall report the results of any testing required by the Division under condition S5 of this permit within 45 days of conducting the tests. The reports shall include the information specified under condition S7 (a) and shall be submitted to the Division in accordance with condition G4 of this permit.

(S10) EXCESS EMISSIONS AND MONITORING SYSTEM PERFORMANCE REPORTS FOR SO_2 EMISSIONS FROM BOILERS 1, 2, AND 3 [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)]

(a) For boilers 1, 2, and 3, 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, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(ii) Specific identification of each period of excess emissions that occurs during start-ups, shutdowns, malfunctions of boilers 1, 2, and 3. The nature and cause of any malfunction (if known), 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) have not been in operative, 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) For the purpose of reporting under this condition, excess emissions are defined as any two-hour period during which the average emissions of SO_2 from boilers 1, 2, or 3 exceed 0.3 lb/MMBtu of heat input.

(c) Notwithstanding the frequency of reporting requirements specified in paragraph (a) of this condition, a permittee who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual as described in WAQSR Chapter 5, Section 2(g)(iv). Any reduction in reporting frequency requires a significant modification to this operating permit pursuant to WAQSR Chapter 6, Section 3(d)(vi)(C).

(d) The reports shall be submitted to the Division in accordance with condition G4 of this permit.

ACID RAIN PERMIT CONDITIONS
ACID RAIN PORTION OF THE OPERATING PERMIT

Issued to: Jim Bridger Plant
Operated by: PacifiCorp
ORIS code: 8066
Effective: Same as operating permit

Acid Rain Permit Contents

AR-1) Statement of Basis.

AR-2) SO_2 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) SO_2 Allowance Allocations & NO_X Requirements for affected units
(amended December 13, 2005 and August 16, 2006)

		2003	2004	2005	2006	2007
Unit 1	SO_2 allowances under Tables 2, 3, or 4 of 40 CFR part 73.	20,907	20,907	20,907	20,907	20,907
	NO_X limit	Pursuant to 40 CFR 76.11, the Division approves a NO_X emissions averaging plan for this unit, effective from calendar years 2000 through 2007. Under the plan, this unit's NO_X emissions shall not exceed the annual average alternative contemporaneous emission limitation of 0.42 lb/MMBtu. In addition, this unit shall not have an annual heat input less than *38,072,583* MMBtu. Under the plan, the actual Btu-weighted annual average NO_X emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_X emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit. In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the Utah Division of Air Quality has also approved this averaging plan. 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.				

		2003	2004	2005	2006	2007
Unit 2	SO_2 allowances under Tables 2, 3, or 4 of 40 CFR part 73.	20,464	20,464	20,464	20,464	20,464
	NO_X limit	Pursuant to 40 CFR 76.11, the Division approves a NO_X emissions averaging plan for this unit, effective from calendar years 2000 through 2007. Under the plan, this unit's NO_X emissions shall not exceed the annual average alternative contemporaneous emission limitation of 0.42 lb/MMBtu. In addition, this unit shall not have an annual heat input less than *40,285,426* MMBtu. Under the plan, the actual Btu-weighted annual average NO_X emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_X emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit. In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the Utah Division of Air Quality has also approved this averaging plan. 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.				

		2003	2004	2005	2006	2007
Unit 3	SO_2 allowances under Tables 2, 3, or 4 of 40 CFR part 73.	19,584	19,584	19,584	19,584	19,584
	NO_X limit	Pursuant to 40 CFR 76.11, the Division approves a NO_X emissions averaging plan for this unit, effective from calendar years 2000 through 2007. Under the plan, this unit's NO_X emissions shall not exceed the annual average alternative contemporaneous emission limitation of 0.42 lb/MMBtu. In addition, this unit shall not have an annual heat input less than *42,447,268* MMBtu. Under the plan, the actual Btu-weighted annual average NO_X emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_X emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit. In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the Utah Division of Air Quality has also approved this averaging plan. 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.				

		2003	2004	2005	2006	2007
Unit 4	SO_2 allowances under Tables 2, 3, or 4 of 40 CFR part 73.	4064	4064	4064	4064	4064
	NO_X limit	Pursuant to 40 CFR 76.8(d)(2), the Division approves a NO_X early election compliance plan for unit 4. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, this unit's annual average NO_X emission rate for each year, determined in accordance with 40 CFR part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1), of 0.45 lb/MMBtu for tangentially fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(1), of 0.40 lb/MMBtu until calendar year 2008. 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.				

* The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO_2 allowance allocations identified in this permit (See 40 CFR 72.84).

AR-3) Comments, Notes and Justifications: None.

AR-4) Permit Application: See Appendix E of this operating permit.

SUMMARY OF SOURCE EMISSION LIMITS AND REQUIREMENTS

Source ID#: **1 - 3 (NADB #BW71, NADB #BW72 & NADB #BW73)** Source Description: **Tangential Coal Fired Boiler (ESP)**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	0.10 lb/MMBtu of heat input, maximum 2-hour average [F6]	WAQSR Ch 3, Sec 2	[F17]	CAM [F19]	Test records [F26] CAM records [F26 & F29]	Test reports [F36] CAM reports [F38] Report excess emissions and permit deviations [F42]
	20% opacity (one 2-minute exceedance of not more than 40% allowed per hour) [F6]	WAQSR Ch 3, Sec 2	If required [F18]	Continuous emissions monitoring [F19]	Test records [F26] Monitoring records [F27]	Test reports [F36] Monitoring reports [F37] Report excess emissions and permit deviations [F42]
SO_2	0.3 lb/MMBtu of heat input, 2-hour average [S4]	WAQSR Ch 3, Sec 4	[S5]	Continuous emissions monitoring [S6]	Test records, if required [S7] Monitoring records [S8]	Test reports [S9] Monitoring & excess emissions reports [S10]
	Title IV Allowances [F3] Boiler 1 - 20,907 TPY [AR-2] Boiler 2 - 20,464 TPY [AR-2] Boiler 3 - 19,584 TPY [AR-2]	WAQSR Ch 6, Sec 3(h)(i)(D) & W.S. 35-11-212 (a) 40 CFR 73	None	Appendix E	Appendix E	Appendix E
NO_X	0.70 lb/MMBtu of heat input, fixed 3-hour average [F6]	WAQSR Ch 3, Sec 3	If required [F18]	Continuous emissions monitoring [F19]	Test records, if required [F26] Monitoring records [F27]	Test reports, if required [F36] Monitoring & excess emissions report [F37]
	Boiler 1 - 0.42 lb/MMBtu and ≥ 43,171,250 mmBtu/yr [AR-2] Boiler 2 - 0.40 lb/MMBtu and ≥ 44,337,267 mmBtu/yr [AR-2] Boiler 3 - 0.41 lb/MMBtu and ≥ 43,260,246 mmBtu/yr [AR-2]	40 CFR 76	None	Appendix E	Appendix E	Appendix E

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#: **4 (NADB #BW74)** Source Description: **Tangential Coal Fired Boiler (ESP)** (Modified June 15, 2004)

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	0.10 lb/MMBtu of heat input not to exceed 502 lb/hr [F6]	WAQSR Ch 6, Sec 2 Permit OP-228 40 CFR 60 Subpart D	[F17]	CAM [F19]	Test records [F26] CAM records [F26 & F29]	Test reports [F36] CAM reports [F38] Report excess emissions and permit deviations [F42]
	20% opacity (one 6-minute exceedance of not more than 27% allowed per hour) [F6] 30% opacity from ESP outlet [F6]	WAQSR Ch 6, Sec 2 Permit OP-228 40 CFR 60 Subpart D WAQSR Ch 6, Sec 2 Permit OP-228	[F18]	[P60-D2] Continuous opacity monitoring [F19]	Test records [F26] Monitoring records [F27] & [P60-D3]	Test reports [F36] Monitoring & excess emissions reports [P60-D4]
SO_2	0.20 lb/MMBtu of heat input not to exceed 1,004 lb/hr, fixed 2-hour average [F6]	WAQSR Ch 6, Sec 2 Permit OP-228 40 CFR 60 Subpart D	If required [F18]	Continuous emissions monitoring [F19] & [P60-D2]	Test records [F26] Monitoring records [F27] & [P60-D3]	Test reports [F36] Monitoring & excess emissions reports [P60-D4]
	Title IV Allowances [F3] Boiler 4 - 4,064 TPY [AR-2]	WAQSR Ch 6, Sec 3 (h)(i)(D) & W.S. 35-11-212 (a) 40 CFR 73	None	Appendix E	Appendix E	Appendix E
NO_X	0.70 lb/MMBtu of heat input not to exceed 3,514 lb/hr, 3-hour average [F6]	WAQSR Ch 6, Sec 2 Permit OP-228 40 CFR 60 Subpart D	If required [F18]	Continuous emissions monitoring [F19] & [P60-D2]	Test records [F26] Monitoring records [F27] & [P60-D3]	Test reports [F36] Monitoring & excess emissions reports [P60-D4]
	0.45 lb/MMBtu [AR-2]	40 CFR 76	None	Appendix E	Appendix E	Appendix E

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#: **11** Source Description: **01 Secondary Crusher Building Transfer Points** (Modified June 15, 2004)

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	Various lb/hr limits [F7]	WAQSR Ch 3, Sec 2 and Ch 6, Sec 2 Permit MD-307	If required [F18]	CAM [F20]	Test records [F26] CAM records [F29]	Test reports [F36] CAM reports [F38] Report excess emissions and permit deviations [F42]
	20% opacity except for not more than 6 min/hr of not more than 40% opacity [F7]	WAQSR Ch 3, Sec 2	[F18]	Daily observations [F20]	Test records [F26] Monitoring records [F28]	Test reports [F36] Monitoring reports [F38] Report excess emissions and permit deviations [F42]

Source ID#: **12** Source Description: **Units 1-3 Distribution Bin Transfer Points** (Modified June 15, 2004)

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	Dust extractor system - no visible emissions [F5]	WAQSR Ch 3, Sec 2 and Ch 6, Sec 2 Permit MD-883	Performance testing [F16] If required [F18]	Weekly observations [F21]	Test records [F26] Monitoring records [F28]	Notification of system start-up and testing [F34 and F35] Test reports [F36] Monitoring reports [F38] Report excess emissions and permit deviations [F42]

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.

8Source ID#: **13 through 15** Source Description: **Units 1 - 3 Conveyor Transfer Points and Silo Vents** (Modified June 15, 2004)

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	Dust extractor system - no visible emissions [F5] Various lb/hr limits (while baghouse is present) [F7]	WAQSR Ch 6, Sec 2 Permit MD-883 WAQSR Ch 3, Sec 2 and Ch 6, Sec 2 Permit MD-307	Performance testing [F16] If required [F18]	CAM [F20] Dust extractor systems - weekly observations [F21]	Test records [F26] Monitoring records [F28] CAM records [F29]	Notification of system start-up and testing [F34 and F35] Test reports [F36] CAM and monitoring reports [F38] Report excess emissions and permit deviations [F42]
	20% opacity except for not more than 6 min/hr of not more than 40% opacity (while baghouse is present)[F7]	WAQSR Ch 3, Sec 2	[F18]	Daily observations [F20]	Test records [F26] Monitoring records [F28]	Test reports [F36] Monitoring reports [F38] Report excess emissions and permit deviations [F42]

Source ID#: **16, 18, 19, 21 and 22** Source Description: **Baghouse Controlled Units** (Modified June 15, 2004)

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	Various lb/hr limits [F7] Operation & Maintenance Plan [F12] Operate chemical foam dust suppression for Source 19 [F9]	WAQSR Ch 3, Sec 2 and Ch 6, Sec 2 Permit OP-267 WAQSR Ch 6, Sec 3(h)(i)(A) WAQSR Ch 6, Sec 2 Permit OP-267	If required [F18]	CAM [F20]	Test records [F26] CAM records [F29] Maintenance Records [F30]	Test reports [F36] CAM reports [F38] Maintenance reports [F39] Report excess emissions and permit deviations [F42]
	Less than 20% opacity [F7] & [P60-Y1]	40 CFR 60 Subpart Y	[F18]	Weekly observations [F20]	Test records [F26] Monitoring records [F28] Control equipment records [P60-Y2]	Test reports [F36] Monitoring reports [F38] Report excess emissions and permit deviations [F42]

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#: **17** Source Description: **Unit 4 Conveyor Transfer Points and Silo Vent** (Modified June 15, 2004)

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	Dust extractor system-no visible emissions [F5] Various lb/hr limits (while baghouse is present) [F7]	WAQSR Ch 6, Sec 2 Permit MD-883 WAQSR Ch 3, Sec 2; Ch 6, Sec 2 Permit OP-267	Performance testing [F16] If required [F18]	CAM [F20] Dust extractor systems - weekly observations [F21]	Test records [F26] Monitoring records [F28] CAM records [F29]	Notification of system start-up and testing [F34 and F35] Test reports [F36] Monitoring and CAM reports [F38] Report excess emissions and permit deviations [F42]
	Less than 20% opacity [F7 (while baghouse is present)] & [P60-Y1]	40 CFR 60 Subpart Y	[F18]	Daily observations (while baghouse is present) [F20]	Test records [F26] Monitoring records [F28] Control equipment records [P60-Y2]	Test reports [F36] Monitoring reports [F38] Report excess emissions and permit deviations [F42]

Source ID#: **20** Source Description: **Overland Conveyor Interface Building Transfer Points** (Modified June 15, 2004)

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	Dry fog system-no visible emissions [F5] Various lb/hr limits (while baghouse is present) [F7] Operate chemical foam dust suppression [F9] Operation and maintenance [F12]	WAQSR Ch 6, Sec 2 Permit MD-883 WAQSR Ch 3, Sec 2 and Ch 6, Sec 2 Permit OP-267 WAQSR Ch 6, Sec 3(h)(i)(A)	Performance testing [F16] If required [F18]	CAM [F20] Dry fog system - weekly observations [F21]	Test records [F26] Monitoring records [F28] CAM records [F29] Maintenance records [F30]	Notification of system start-up and testing [F34 and F35] Test reports [F36] Monitoring and CAM reports [F38] Maintenance reports [F39] Report excess emissions and permit deviations [F42]
	Less than 20% opacity [F7 (while baghouse is present)]] & [P60-Y1]	40 CFR 60 Subpart Y	[F18]	Daily observations (while baghouse is present) [F20]	Test records [F26] Monitoring records [F28] Control equipment records [P60-Y2]	Test reports [F36] Monitoring reports [F38] Report excess emissions and permit deviations [F42]

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#: **23** Source Description: **Coal Transfer to Coal Piles**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Fugitive Particulate Emissions	20% opacity except for one 6-minute period/hr of not more than 40% [F5] Operate water spray systems according to water spray plan [F9] Operation & Maintenance Plan [F12]	WAQSR Ch 3, Sec 2 WAQSR Ch 6, Sec 2 Permit OP-267 WAQSR Ch 6, Sec 3(h)(i)(A)	If required [F18]	Quarterly Method 9 observations [F22]	Test records [F26] Monitoring records [F28] Maintenance records [F30]	Test reports [F36] Monitoring reports [F38] Report excess emissions and permit deviations [F42] Maintenance reports [F39]

Source ID#: **24** Source Description: **Coal Stockpiles**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Fugitive Particulate Emissions	20% opacity except for one 6-minute period/hr of not more than 40% [F5] Limited coal inventory [F10] Dress & seal "Main" pile [F10] Limit activity [F10]	WAQSR Ch 3, Sec 2 WAQSR Ch 6, Sec 2 Permit OP-267	If required [F18]	None	Test records [F26] Monthly records [F31]	Test reports [F36] Report stockpile sizes annually [F41] Report excess emissions and permit deviations [F42]

Source ID#: **25** Source Description: **Plant Site Roadways**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Fugitive Particulate Emissions	20% opacity except for one 6-minute period/hr of not more than 40% [F5] Treat with dust suppressant chemical on regular basis [F4]	WAQSR Ch 3, Sec 2 WAQSR Ch 6, Sec 2 Permit OP-267	If required [F18]	None	Test records [F26]	Test reports [F36] Report excess emissions and permit deviations [F42] Annual dust control reports [F41]

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#: **26** Source Description: **Ash Unloading**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Fugitive Particulate Emissions	20% opacity during unloading activity [F8]	WAQSR Ch 6, Sec 2 Permit OP-267 and Waiver AP-589	If required [F18]	Quarterly Method 9 observations [F23]	Test records [F26] Monitoring records [F28]	Test reports [F36] Monitoring reports [F38] Report excess emissions and permit deviations [F42]

Source ID#: **27** Source Description: **Ash Haul to Landfill**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Fugitive Particulate Emissions	20% opacity except for one 6-minute period/hr of not more than 40% [F5] Treat unpaved areas with dust suppressant chemical on regular basis [F4] Treat ash disposal haul roads with chemical dust suppressant. Treat active portions of ash stockpile during bulldozing. Apply water/chemical dust suppressant to disturbed acreage of ash stockpile [F8]	WAQSR Ch 6, Sec 2 Permit OP-267 WAQSR Ch 6, Sec 2 Permit OP-177 WAQSR Ch 6, Sec 2 Permit OP-267	If required [F18]	None	Test records [F26]	Test reports [F36] Annual dust control reports [F41] Report excess emissions and permit deviations [F42]

Source ID#: **N/A** Source Description: **Facility-Wide**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Fugitive Particulate Emissions	Fugitive dust control [F4]	WAQSR Ch 6, Sec 2 Permit MD-307 WAQSR Ch 6, Sec 2 Permit OP-267	None	Ambient monitoring network [F25]	Ambient monitoring records [F32]	Ambient monitoring reports [F40] Annual dust control reports [F41] Report excess emissions and permit deviations [F42]

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#: **N/A** Source Description: **Diesel-Fired Emergency Equipment (Modified September 6, 2005)**

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	30% Opacity [F11] Operation and Maintenance Plan [F12]	WAQSR Ch 3, Sec 2 WAQSR Ch 6, Sec 3(h)(i)(A)	If required [F18]	Semi-annual observations [F24]	Test records [F26] Monitoring records [F28] Maintenance records [F30]	Test reports [F36] Monitoring reports [F38] Maintenance reports [F39] Report excess emissions and permit deviations [F42]
HAPs	**Two 979 hp engines: "Affected source" with no applicable requirements [P63-ZZZZ1]**	**40 CFR 63 Subpart ZZZZ**	**none**	**none**	**none**	**Report excess emissions and permit deviations [F42]**

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 (Modified June 15, 2004)

AQD	Air Quality Division
BACT	Best available control technology (see Definitions)
BHP	Brake horsepower
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)
gpm	Gallon(s) per minute
gr	Grain(s)
H_2S	Hydrogen sulfide
HAP(s)	Hazardous air pollutant(s)
hp	Horsepower
hr	Hour(s)
lb	Pound(s)
M	Thousand
MACT	Maximum available control technology (see Definitions)
mfr	Manufacturer
mg	Milligram(s)
MM	Million
MVAC	Motor Vehicle Air Conditioner
N/A	Not applicable
NMHC(s)	Non-methane hydrocarbon(s)
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)
psig	Pounds per square inch gauge
QIP	Quality Improvement Plan
RVP	Reid Vapor Pressure
SCF	Standard cubic foot (feet)
SCM	Standard cubic meter(s)
SIC	Standard Industrial Classification
SO_2	Sulfur dioxide
SO_3	Sulfur trioxide
SO_X	Oxides of sulfur
TPH	Tons per hour
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 CFR Part 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

40 CFR 60 Subpart D

Subpart D-Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971

§ 60.40 Applicability and designation of affected facility.

a) The affected facilities to which the provisions of this subpart apply are:

(1) Each fossil-fuel-fired steam generating unit of more than 73 megawatts heat input rate (250 million Btu per hour).

(2) Each fossil-fuel and wood-residue-fired steam generating unit capable of firing fossil fuel at a heat input rate of more than 73 megawatts (250 million Btu per hour).

(b) Any change to an existing fossil-fuel-fired steam generating unit to accommodate the use of combustible materials, other than fossil fuels as defined in this subpart, shall not bring that unit under the applicability of this subpart.

(c) Except as provided in paragraph (d) of this section, any facility under paragraph (a) of this section that commenced construction or modification after August 17, 1971, is subject to the requirements of this subpart.

(d) The requirements of §60.44 (a)(4), (a)(5), (b) and (d), and 60.45(f)(4)(vi) are applicable to lignite-fired steam generating units that commenced construction or modification after December 22, 1976.

(e) Any facility covered under subpart Da is not covered under this subpart.

[42 FR 37936, July 25, 1977, as amended at 43 FR 9278, Mar. 7, 1978; 44 FR 33612, June 17, 1979]

§ 60.41 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act, and in subpart A of this part.

(a) *Fossil-fuel fired steam generating unit* means a furnace or boiler used in the process of burning fossil fuel for the purpose of producing steam by heat transfer.

(b) *Fossil fuel* means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials for the purpose of creating useful heat.

(c) *Coal refuse* means waste-products of coal mining, cleaning, and coal preparation operations (e.g. culm, gob, etc.) containing coal, matrix material, clay, and other organic and inorganic material.

(d) *Fossil fuel and wood residue-fired steam generating unit* means a furnace or boiler used in the process of burning fossil fuel and wood residue for the purpose of producing steam by heat transfer.

(e) *Wood residue* means bark, sawdust, slabs, chips, shavings, mill trim, and other wood products derived from wood processing and forest management operations.

(f) *Coal* means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388-77, 90, 91, 95, or 98a (incorporated by reference–see Sec. 60.17).

[39 FR 20791, June 14, 1974, as amended at 40 FR 2803, Jan. 16, 1975; 41 FR 51398, Nov. 22, 1976; 43 FR 9278, Mar. 7, 1978; 48 FR 3736, Jan. 27, 1983; 65 FR 61752, Oct. 17, 2000]

§ 60.42 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which:

(1) Contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb per million Btu) derived from fossil fuel or fossil fuel and wood residue.

(2) Exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity.

(b)(1) On or after December 28, 1979, no owner or operator shall cause to be discharged into the atmosphere from the Southwestern Public Service Company's Harrington Station #1, in Amarillo, TX, any gases which exhibit greater than 35 percent opacity, except that a maximum or 42 percent opacity shall be permitted for not more than 6 minutes in any hour.

(2) Interstate Power Company shall not cause to be discharged into the atmosphere from its Lansing Station Unit No. 4 in Lansing, IA, any gases which exhibit greater than 32 percent opacity, except that a maximum of 39 percent opacity shall be permitted for not more than six minutes in any hour.

[39 FR 20792, June 14, 1974, as amended at 41 FR 51398, Nov. 22, 1976; 42 FR 61537, Dec. 5, 1977; 44 FR 76787, Dec. 28, 1979; 45 FR 36077, May 29, 1980; 45 FR 47146, July 14, 1980; 46 FR 57498, Nov. 24, 1981; 61 FR 49976, Sept. 24, 1996; 65 FR 61752, Oct. 17, 2000]

§ 60.43 Standard for sulfur dioxide.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:

(1) 340 nanograms per joule heat input (0.80 lb per million Btu) derived from liquid fossil fuel or liquid fossil fuel and wood residue.

(2) 520 nanograms per joule heat input (1.2 lb per million Btu) derived from solid fossil fuel or solid fossil fuel and wood residue, except as provided in paragraph (e) of this section.

(b) When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) shall be determined by proration using the following formula:

$$PS_{SO_2} = \frac{y(340) + z(520)}{y + z}$$

where:

PS_{SO2} is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired,

y is the percentage of total heat input derived from liquid fossil fuel, and

z is the percentage of total heat input derived from solid fossil fuel.

(c) Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.

(d) [Reserved]

(e) Units 1 and 2 (as defined in appendix G) at the Newton Power Station owned or operated by the Central Illinois Public Service Company will be in compliance with paragraph (a)(2) of this section if Unit 1 and Unit 2 individually comply with paragraph (a)(2) of this section or if the combined emission rate from Units 1 and 2 does not exceed 470 nanograms per joule (1.1 lb per million Btu) combined heat input to Units 1 and 2.

[39 FR 20792, June 14, 1974, as amended at 41 FR 51398, Nov. 22, 1976; 52 FR 28954, Aug. 4, 1987]

§ 60.44 Standard for nitrogen oxides.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO_2 in

excess of:

(1) 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.

(2) 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel, liquid fossil fuel and wood residue, or gaseous fossil fuel and wood residue.

(3) 300 nanograms per joule heat input (0.70 lb per million Btu) derived from solid fossil fuel or solid fossil fuel and wood residue (except lignite or a solid fossil fuel containing 25 percent, by weight, or more of coal refuse).

(4) 260 nanograms per joule heat input (0.60 lb per million Btu) derived from lignite or lignite and wood residue (except as provided under paragraph (a)(5) of this section).

(5) 340 nanograms per joule heat input (0.80 lb per million Btu) derived from lignite which is mined in North Dakota, South Dakota, or Montana and which is burned in a cyclone-fired unit.

(b) Except as provided under paragraphs (c) and (d) of this section, when different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula:

$$PS_{NO_x} = \frac{w(260) + x(86) + y(130) + z(300)}{w + x + y + z}$$

where:

PS_{NO_x}=is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired;

w=is the percentage of total heat input derived from lignite;

x=is the percentage of total heat input derived from gaseous fossil fuel;

y=is the percentage of total heat input derived from liquid fossil fuel; and

z=is the percentage of total heat input derived from solid fossil fuel (except lignite).

(c) When a fossil fuel containing at least 25 percent, by weight, of coal refuse is burned in combination with gaseous, liquid, or other solid fossil fuel or wood residue, the standard for nitrogen oxides does not apply.

(d) Cyclone-fired units which burn fuels containing at least 25 percent of lignite that is mined in North Dakota, South Dakota, or Montana remain subject to paragraph (a)(5) of this section regardless of the types of fuel combusted in combination with that lignite.

[39 FR 20792, June 14, 1974, as amended at 41 FR 51398, Nov. 22, 1976; 43 FR 9278, Mar. 7, 1978; 51 FR 42797, Nov. 25, 1986]

§ 60.45 Emission and fuel monitoring.

(a) Each owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, and either oxygen or carbon dioxide except as provided in paragraph (b) of this section.

(b) Certain of the continuous monitoring system requirements under paragraph (a) of this section do not apply to owners or operators under the following conditions:

(1) For a fossil fuel-fired steam generator that burns only gaseous fossil fuel, continuous monitoring systems for measuring the opacity of emissions and sulfur dioxide emissions are not required.

(2) For a fossil fuel-fired steam generator that does not use a flue gas desulfurization device, a continuous monitoring system for measuring sulfur dioxide emissions is not required if the owner or operator monitors sulfur dioxide emissions by fuel sampling and analysis.

(3) Notwithstanding §60.13(b), installation of a continuous monitoring system for nitrogen oxides may be delayed until after the initial performance tests under §60.8 have been conducted. If the owner or operator demonstrates during the performance test that emissions of nitrogen oxides are less than 70 percent of the applicable standards in §60.44, a continuous monitoring system for measuring nitrogen oxides emissions is not required. If the initial performance test results show that nitrogen oxide emissions are greater than 70 percent of the applicable standard, the owner or operator shall install a continuous monitoring system for nitrogen oxides within one year after the date of the initial performance tests under §60.8 and comply with all other applicable monitoring requirements under this part.

(4) If an owner or operator does not install any continuous monitoring systems for sulfur oxides and nitrogen oxides, as provided under paragraphs (b)(1) and (b)(3) or paragraphs (b)(2) and (b)(3) of this section a continuous monitoring system for measuring either oxygen or carbon dioxide is not required.

(c) For performance evaluations under §60.13(c) and calibration checks under §60.13(d), the following procedures shall be used:

(1) Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide and nitrogen oxides continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in §60.46(d).

(2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of appendix B to this part.

(3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

[in parts per million]

Fossil Fuel	Span value for sulfur dioxide	Span value for nitrogen oxides
Gas.....	(1)	500
Liquid.....	1,000	500
Solid.....	1,500	1,000
Combinations.....	1,000y+1,500z	500(x+y)+1,000z

(1) Not applicable

where:

x=the fraction of total heat input derived from gaseous fossil fuel, and

y=the fraction of total heat input derived from liquid fossil fuel, and

z=the fraction of total heat input derived from solid fossil fuel.

(4) All span values computed under paragraph (c)(3) of this section for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm.

(5) For a fossil fuel-fired steam generator that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Administrator's approval.

(d) [Reserved]

(e) For any continuous monitoring system installed under paragraph (a) of this section, the following conversion procedures shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/million Btu):

(1) When a continuous monitoring system for measuring oxygen is selected, the measurement of the pollutant concentration and oxygen concentration shall each be on a consistent basis (wet or dry). Alternative procedures approved by the Administrator shall be used when measurements are on a wet basis. When measurements are on a dry basis, the following conversion procedure shall be used:

$$E = CF\left(\frac{20.9}{20.9 - \%O_2}\right)$$

where: E, C, F, and $\%O_2$ are determined under paragraph (f) of this section.

(2) When a continuous monitoring system for measuring carbon dioxide is selected, the measurement of the pollutant concentration and carbon dioxide concentration shall each be on a consistent basis (wet or dry) and the following conversion procedure shall be used:

$$E = CF_c\left(\frac{100}{\%CO_2}\right)$$

where: E, C, F_c and $\%CO_2$ are determined under paragraph (f) of this section.

(f) The values used in the equations under paragraphs (e) (1) and (2) of this section are derived as follows:

(1) E=pollutant emissions, ng/J (lb/million Btu).

(2) C=pollutant concentration, ng/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each one-hour period by 4.15×10^{4} M ng/dscm per ppm (2.59×10^{-9} M lb/dscf per ppm) where M=pollutant molecular weight, g/g-mole (lb/lb-mole). M=64.07 for sulfur dioxide and 46.01 for nitrogen oxides.

(3) $\%O_2$, $\%CO_2$=oxygen or carbon dioxide volume (expressed as percent), determined with equipment specified under paragraph (a) of this section.

(4) F, F_c=a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted (F_c), respectively. Values of F and F_c are given as follows:

(i) For anthracite coal as classified according to ASTM D388-77, 90, 91, 95, or 98a (incorporated by reference-see §60.17), $F = 2{,}723 \times 10^{-17}$ dscm/J (10,140 dscf/million Btu and $F_c = 0.532 \times 10^{-17}$ scm CO_2/J (1,980 scf CO_2/million Btu).

(ii) For subbituminous and bituminous coal as classified according to ASTM D388-77, 90, 91, 95, or 98a (incorporated by reference-see §60.17), $F = 2.637 \times 10^{7}$ dscm/J (9,820 dscf/million Btu) and $F_c = 0.486 \times 10^{-7}$ scm CO_2/J (1,810 scf CO_2/million Btu).

(iii) For liquid fossil fuels including crude, residual, and distillate oils, $F = 2.476 \times 10^{-7}$ dscm/J (9,220 dscf/million Btu) and $F_c = 0.384 \times 10^{-7}$ scm CO_2/J (1,430 scf CO_2/million Btu).

(iv) For gaseous fossil fuels, $F = 2.347 \times 10^{-7}$ dscm/J (8,740 dscf/million Btu). For natural gas, propane, and butane fuels, $F_c = 0.279 \times 10^{-7}$ scm CO_2/J (1,040 scf CO_2/million Btu) for natural gas, 0.322×10^{-7} scm CO_2/J (1,200 scf CO_2/million Btu) for propane, and 0.338×10^{-7} scm CO_2/J (1,260 scf CO_2/million Btu) for butane.

(v) For bark $F = 2.589 \times 10^{-7}$ dscm/J (9,640 dscf/million Btu) and $F_c = 0.500 \times 10^{-7}$ scm CO_2/J (1,840 scf CO_2/ million Btu). For wood residue other than bark $F = 2.492 \times 10^{-7}$ dscm/J (9,280 dscf/million Btu) and $F_c = 0.494 \times 10^{-7}$ scm CO_2/J (1,860 scf CO_2/ million Btu).

(vi) For lignite coal as classified according to ASTM D388-77, 90, 91, 95, or 98a (incorporated by reference-see §60.17), $F = 2.659 \times 10^{-7}$ dscm/J (9,900 dscf/million Btu) and $F_c = 0.516 \times 10^{-17}$ scm CO_2/J (1,920 scf CO_2/million Btu).

(5) The owner or operator may use the following equation to determine an F factor (dscm/J or dscf/million Btu) on a dry basis (if it is desired to calculate F on a wet basis, consult the Administrator) or F_c factor (scm CO_2/J, or scf CO_2/million Btu) on either basis in lieu of the F or F_c factors specified in paragraph (f)(4) of this section:

$$F = 10^{-6}\frac{227.2(\%H) + 95.5(\%C) + 35.6(\%S) + 8.7(\%N) - 28.7(\%O)}{GCV}$$

$$F_c = \frac{2.0 \times 10^{-5}(\%C)}{GCV}$$

(SI units)

$$F = \frac{10^6[3.64(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O)]}{GCV}$$

(English units)

$$F_c = \frac{20.0(\%C)}{GCV}$$

(SI units)

$$F_c = \frac{321 \times 10^3(\%C)}{GCV}$$

(English units)

(i) H, C, S, N, and O are content by weight of hydrogen, carbon, sulfur, nitrogen, and oxygen (expressed as percent), respectively, as determined on the same basis as GCV by ultimate analysis of the fuel fired, using ASTM method D3178-73 (Reapproved 1979), 89 or D3176-74 or 89 (solid fuels) or computed from results using ASTM method D1137-53 or 75, D1945-64, 76, 91, or 96, or D1946-77 or 90 (Reapproved 1994) (gaseous fuels) as applicable. (These five methods are incorporated by reference-see §60.17.)

(ii) GVC is the gross calorific value (kJ/kg, Btu/lb) of the fuel combusted determined by the ASTM test methods D2015-77 (Reapproved 1978), 96, or D5865-98 for solid fuels and D1826-77 or 94 for gaseous fuels as applicable. (These two methods are incorporated by reference-see §60.17.)

(iii) For affected facilities which fire both fossil fuels and nonfossil fuels, the F or F_c value shall be subject to the Administrator's approval.

(6) For affected facilities firing combinations of fossil fuels or fossil fuels and wood residue, the F or F_c factors determined by paragraphs (f)(4) or (f)(5) of this section shall be prorated in accordance with the applicable formula as follows:

$$F = \sum_{i=1}^{n} X_i F_i$$

or

$$F_c = \sum_{i=1}^{n} X_i (F_c)_i$$

where:

X_i=the fraction of total heat input derived from each type of fuel (e.g. natural gas, bituminous coal, wood residue, etc.)

F_i or $(F_c)_i$=the applicable F or F_c factor for each fuel type determined in accordance with paragraphs (f)(4) and (f)(5) of this section.

n=the number of fuels being burned in combination.

(g) Excess emission and monitoring system performance reports shall be submitted to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission and MSP report shall include the information required in §60.7(c). Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:

(1) *Opacity.* Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.

(i) For sources subject to the opacity standard of §60.42(b)(1), excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 35 percent opacity, except that one six-minute average per hour of up to 42 percent opacity need not be reported.

(ii) For sources subject to the opacity standard of §60.42(b)(2), excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 32 percent opacity, except that one six-minute average per hour of up to 39 percent opacity need not be reported.

(iii) For sources subject to the opacity standard of §60.42(b)(3), excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 30 percent opacity, except that one six-minute average per hour of up to 37 percent opacity need not be reported.

(2) *Sulfur dioxide.* Excess emissions for affected facilities are defined as:

(i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under §60.43.

(3) *Nitrogen oxides.* Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under §60.44.

[40 FR 46256, Oct. 6, 1975, 65 FR 61752, Oct. 17, 2000]

Editorial Note: For *Federal Register* citations affecting §60.45, see the List of CFR Sections Affected in the Finding Aids section of this volume.

§ 60.46 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (d) of this section.

(b) The owner or operator shall determine compliance with the particulate matter, SO_2, and NO_X standards in §60.42, 60.43, and 60.44 as follows:

(1) The emission rate (E) of particulate matter, SO_2, or NO_X shall be computed for each run using the following equation:

$$E = CF_d\left(\frac{20.9}{20.9 - \%O_2}\right)$$

E = emission rate of pollutant, ng/J (lb/million Btu).

C = concentration of pollutant, ng/dscm (lb/dscf).

$\%O_2$ = oxygen concentration, percent dry basis.

F_d = factor as determined from Method 19.

(2) Method 5 shall be used to determine the particular matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems and Method 5B shall be used to determine the particulate matter concentration (C) after FGD systems.

(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train shall be set to provide an average gas temperature of 160±14 °C (320±25 °F).

(ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration ($\%O_2$). The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of the sample O_2 concentrations at all traverse points.

(iii) If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points.

(3) Method 9 and the procedures in §60.11 shall be used to determine opacity.

(4) Method 6 shall be used to determine the SO_2 concentration.

(i) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.

(ii) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration ($\%O_2$). The O_2 sample shall be taken simultaneously with, and at the same point as, the SO_2 sample. The SO_2 emission rate shall be computed for each pair of SO_2 and O_2 samples. The SO_2 emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.

(5) Method 7 shall be used to determine the NO_X concentration.

(i) The sampling site and location shall be the same as for the SO_2 sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.

(ii) For each NO_X sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration ($\%O_2$). The sample shall be taken simultaneously with, and at the same point as, the NO_X sample.

(iii) The NO_x emission rate shall be computed for each pair of NO_X and O_2 samples. The NO_X emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.

(c) When combinations of fossil fuels or fossil fuel and wood residue are fired, the owner or operator (in order to compute the prorated standard as shown in §60.43(b) and 60.44(b)) shall determine the percentage (w, x, y, or z) of the total heat input derived from each type of fuel as follows:

(1) The heat input rate of each fuel shall be determined by multiplying the gross calorific value of each fuel fired by the rate of each fuel burned.

(2) ASTM Methods D 2015-77 (Reapproved 1978), 96, or D5865-98 (solid fuels), D240-76 or 92 (liquid fuels), or D1826-77 or 94 (gaseous fuels) (incorporated by reference-see §60.17) shall be used to determine the gross calorific values of the fuels. The method used to determine the calorific value of wood residue must be approved by the Administrator.

(3) Suitable methods shall be used to determine the rate of each fuel burned during each test period, and a material balance over the steam generating system shall be used to confirm the rate.

(d) The owner or operator may use the following as alternatives to the reference methods and procedures in this section or in other sections as specified:

(1) The emission rate (E) of particulate matter, SO_2 and NO_X may be determined by using the F_c factor, provided that the following procedure is used:

(i) The emission rate (E) shall be computed using the following equation:

$$E = CF_c\left(\frac{100}{\%CO_2}\right)$$

where:

E=emission rate of pollutant, ng/J (lb/million Btu).

C=concentration of pollutant, ng/dscm (lb/dscf).

$\%CO_2$=carbon dioxide concentration, percent dry basis.

F_c=factor as determined in appropriate sections of Method 19.

(ii) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O_2 and CO_2 concentration according to the procedures in paragraph (b) (2)(ii), (4)(ii), or (5)(ii) of this section. Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than ±3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{oa}=0.209 (F_{da}/F_{ca}), then the following procedure shall be followed:

(A) When F_o is less than 0.97 F_{oa}, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.

(B) When F_o is less than 0.97 F_{oa} and when the average difference (d) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(C) When F_o is greater than 1.03 F_{oa} and when the average difference d is positive, then E shall be decreased by that proportion over 1.03 F_{oa}, e.g., if F_o is 1.05 F_{oa}, E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.

(2) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). The procedures of sections 2.1 and 2.3 of Method 5B may be used with Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.

(3) Particulate matter and SO_2 may be determined simultaneously with the Method 5 train provided that the following changes are made:

(i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5.

(ii) All applicable procedures in Method 8 for the determination of SO_2 (including moisture) are used:

(4) For Method 6, Method 6C may be used. Method 6A may also be used whenever Methods 6 and 3B data are specified to determine the SO_2 emission rate, under the conditions in paragraph (d)(1) of this section.

(5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O_2 concentration ($\%O_2$) for the emission rate correction factor.

(6) For Method 3, Method 3A or 3B may be used.

(7) For Method 3B, Method 3A may be used.

[54 FR 6662, Feb. 14, 1989; 54 FR 21344, May 17, 1989, as amended at 55 FR 5212, Feb. 14, 1990; 65 FR 61752, Oct. 17, 2000]

APPENDIX B

40 CFR 60 Subpart Y

Subpart Y – Standards of Performance for Coal Preparation Plants

§0.250 Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to any of the following affected facilities in coal preparation plants which process more than 181 Mg (200 tons) per day: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, and coal transfer and loading systems.

(b) Any facility under paragraph (a) of this section that commences construction or modification after October 24, 1974, is subject to the requirements of this subpart.

[42 FR 37938, July 25, 1977; 42 FR 44812, Sept. 7, 1977, as amended at 65 FR 61757, Oct. 17, 2000]

§60.251 Definitions.

As used in this subpart, all terms not defined herein have the meaning given them in the Act and in subpart A of this part.

(a) *Coal preparation plant* means any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying.

(b) *Bituminous coal* means solid fossil fuel classified as bituminous coal by ASTM Designation D388-77, 90, 91, 95, or 98a (incorporated by reference-see §60.17).

(c) *Coal* means all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM Designation D388-77, 90, 91, 95, or 98a (incorporated by reference-see §60.17).

(d) *Cyclonic flow* means a spiraling movement of exhaust gases within a duct or stack.

(e) *Thermal dryer* means any facility in which the moisture content of bituminous coal is reduced by contact with a heated gas stream which is exhausted to the atmosphere.

(f) *Pneumatic coal-cleaning equipment* means any facility which classifies bituminous coal by size or separates bituminous coal from refuse by application of air stream(s).

(g) *Coal processing and conveying equipment* means any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This includes, but is not limited to, breakers, crushers, screens, and conveyor belts.

(h) *Coal storage system* means any facility used to store coal except for open storage piles.

(i) *Transfer and loading system* means any facility used to transfer and load coal for shipment.

[41 FR 2234, Jan. 15, 1976, as amended at 48 FR 3738, Jan. 27, 1983; 65 FR 61757, Oct. 17, 2000]

§60.252 Standards for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any thermal dryer gases which:

(1) Contain particulate matter in excess of 0.070 g/dscm (0.031 gr/ dscf).

(2) Exhibit 20 percent opacity or greater.

(b) On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any pneumatic coal cleaning equipment, gases which:

(1) Contain particulate matter in excess of 0.040 g/dscm (0.017 gr/ dscf).

(2) Exhibit 10 percent opacity or greater.

(c) On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

[41 FR 2234, Jan. 15, 1976, as amended at 65 FR 61757, Oct. 17, 2000]

§60.253 Monitoring of operations.

(a) The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows:

(1) A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within ±1.7 °C (±3 °F).

(2) For affected facilities that use venturi scrubber emission control equipment:

(i) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±1 inch water gauge.

(ii) A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ±5 percent of design water supply pressure. The pressure sensor or tap must be located close to the water discharge point. The Administrator may be consulted for approval of alternative locations.

(b) All monitoring devices under paragraph (a) of this section are to be recalibrated annually in accordance with procedures under §60.13(b).

[41 FR 2234, Jan. 15, 1976, as amended at 54 FR 6671, Feb. 14, 1989; 65 FR 61757, Oct. 17, 2000]

§60.254 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(b) The owner or operator shall determine compliance with the particular matter standards in §60.252 as follows:

(1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin.

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

[54 FR 6671, Feb. 14, 1989]

APPENDIX C

Water Spray Operations Plan

WATER SPRAY OPERATIONS PLAN

Water sprays are used at the radial stacker (01B conveyor) telescoping spout and the 01X conveyor telescoping spout during non-freezing temperatures (above 35° Fahrenheit ambient air temperature). The overland conveyor building does not have a water spray system as stated in MD-145 permit condition #4. The material transported by the overland conveyor is treated at the tail end of the 01W conveyor and/or the tail end of the 01A conveyor with a residual dust suppressant or water as needed.

The dust suppression system is maintained and serviced as ambient permit conditions permit. The dust suppression system can not be operated below ambient temperatures of 20°F.

APPENDIX D

Operation and Maintenance Plan for
Diesel-Fired Emergency Equipment,
Water/Chemical Dust Suppression Systems,
and Dry Fog System
(Modified June 15, 2004)

Air Compliance Demonstration Operation and Maintenance Plan
For Material Handling Dust Suppression Systems and Diesel Engines
Jim Bridger Plant

Material Handling Dust Suppression Systems:

- Maintain and operate each system in accordance with all manufacturer's operational practices and recommendations.
- During the periodic inspection of each material handling dust suppression system, a visual observation of spray system performance will be made by a "qualified observer".
- Conduct an EPA Method 9 opacity test once every six months.
- Observation of visible emissions which exceed the allowable specified in the operating permit shall trigger immediate corrective action to bring the unit into compliance.
- Make a semiannual report of the exceedance of each emission limit.

Emergency Diesel Generators and Diesel Fire Pump:

- Maintain and operate each system in accordance with all manufacturer's operational practices and recommendations.
- During the periodic operational tests of the units to ensure availability, a visual observation of equipment performance will be made by a "qualified observer".
- Conduct an EPA method 9 opacity test once every six months.
- Observation of visible emissions which exceed the allowable specified in the operating permit shall trigger immediate corrective action to bring the unit into compliance.
- Make semiannual report of the exceedance of each emission limit.

Appendix A
Air Quality Permit MD-883

Introductory Preventative Maintenance Plan for Dry Fog System

• As part of the plant fuelman's equipment checks performed each shift, the fog system will be monitored for proper function. If the fuelman notices abnormally low fog production from the system, the fuelman will remove each fog generator from the injection port and verify proper function. The fuelman will generate maintenance requests to repair or replace defective fog generators.

• The dry fog water supply filter will be inspected periodically for pluggage and replaced as needed to assure reliable operations of the fogging system. As filter life is a function of water quality, inspection and replacement intervals will be determined by operating experience. Once the appropriate replacement interval is determined a PM order will be written to assure regular replacement.

• Based on our operating experience with the dry fog system, and manufacturer's recommendations, a preventative maintenance and spare parts stocking program will be developed to assure reliable operation of the dry fog system.

APPENDIX E

Phase II Permit Application,
Phase II NO_X Compliance Plan,
and
Phase II NO_X Averaging Plan

(Amended to include most recent version; *May 10, 2004*)

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Acid Rain Permit Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31

This submission is: ☐ **New** ■ **Revised**

STEP 1

Identify the source by plant name, State, and ORIS code.

Jim Bridger Plant (Plant Name)	Wyoming (State)	8066 (ORIS Code)

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a." For new units, enter the requested information in columns "c" and "d."

a	b	c	d
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	New Units Commence Operation Date	New Units Monitor Certification Deadline
BW71	Yes		
BW72	Yes		
BW73	Yes		
BW74	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		

06-26-2002 310120

Jim Bridger Plant	Wyoming	8066

'EP 3

ıead 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.

'EP 3, ont'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.

Jim Bridger Plant	Wyoming	8066

Liability, Cont'd.

`p 3, ıt'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.

Certification

STEP 4

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	Barry G. Cunningham	
Signature	BG Cunningham	Date 3/27/02

06-23-20... ...01

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Phase II NO_x Compliance Plan

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

This submission is: ☐ New ■ Revised

STEP 1
Indicate plant name, State, and ORIS code from NADB, if applicable

Plant Name	State	ORIS Code
Jim Bridger Plant	WY	8066

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# BW71 Type T	ID# BW72 Type T	ID# BW73 Type T	ID# BW74 Type T	ID# Type	ID# Type
(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	☐	☐	☐	☐	☐	☐
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	■	■	■	■	☐	☐
(c) EPA-approved early election plan under 40 CFR 76.8 through 12/31/07 (also indicate above emission limit specified in plan)	☐	☐	☐	■	☐	☐
(d) Standard annual average emission limitation of 0.46 lb/mmBtu (for Phase II dry bottom wall-fired boilers)	☐	☐	☐	☐	☐	☐
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)	☐	☐	☐	☐	☐	☐
(f) Standard annual average emission limitation of 0.68 lb/mmBtu (for cell burner boilers)	☐	☐	☐	☐	☐	☐
(g) Standard annual average emission limitation of 0.86 lb/mmBtu (for cyclone boilers)	☐	☐	☐	☐	☐	☐
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)	☐	☐	☐	☐	☐	☐
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)	☐	☐	☐	☐	☐	☐
(j) NO_x Averaging Plan (include NO_x Averaging form)	■	■	■	☐	☐	☐
(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)	☐	☐	☐	☐	☐	☐
(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)	☐	☐	☐	☐	☐	☐

06-26-2

Jim Bridger Plant WY 8066

TEP 2, cont'd.

	ID# BW71 Type T	ID# BW72 Type T	ID# BW73 Type T	ID# BW74 Type T	ID# Type	ID# 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)	☐	☐	☐	☐	☐	☐
(n) AEL (include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)	☐	☐	☐	☐	☐	☐
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing	☐	☐	☐	☐	☐	☐
(p) Repowering extension plan approved or under review	☐	☐	☐	☐	☐	☐

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	Barry G. Cunningham	
Signature	B G Cunningham	Date 3/27/02

EPA Form 7610-28 (3-97)

United S s
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Phase II NO_x Averaging Plan

For more information, see instructions and refer to 40 CFR 76.11

This submission is: ☐ New ■ Revised

STEP 1

Identify the units participating in this averaging plan by plant name, State, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation (ACEL) in lb/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 3 if necessary.

Plant Name	State	ID#	(a) Emission Limitation	(b) ACEL	(c) Annual Heat Input Limit
Dave Johnston	WY	BW43	0.68	0.60	17,861,947
Dave Johnston	WY	BW44	0.40	0.45	37,651,633
Hunter	UT	3	0.46	0.43	28,584,717
Huntington	UT	2	0.40	0.43	37,695,527
Jim Bridger	WY	BW71	0.45	0.42	38,072,583
Jim Bridger	WY	BW72	0.45	0.42	40,285,426
Jim Bridger	WY	BW73	0.45	0.42	42,447,268
Naughton	WY	1	0.40	0.58	15,982,013
Naughton	WY	2	0.40	0.56	19,658,118

STEP 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan		Btu-weighted annual average emission rate for same units operated in compliance with 40 CFR 76.5, 76.6 or 76.7
0.45 lb/mmBtu	≤	0.45 lb/mmBtu

$$\frac{\sum_{i=1}^{n} (R_{Li} \times HI_i)}{\sum_{i=1}^{n} HI_i} \leq \frac{\sum_{i=1}^{n} [R_{1i} \times HI_i]}{\sum_{i=1}^{n} HI_i}$$

Where,

R_{L_i} = Alternative contemporaneous annual emission limitation for unit i, in lb/mmBtu, as specified in column (b) of Step 1:

R_{1_i} = Applicable emission limitation for unit i, in lb/mmBtu, as specified in column (a) of Step 1;

HI_i = Annual heat input for unit i, in mmBtu, as specified in column (c) of Step 1;

n = Number of units in the averaging plan

STEP 3

Mark one of the two options and enter dates.

■ This plan is effective for calendar year 2004 through calendar year2007 unless notification to terminate the plan is given.

☐ Treat this plan as ☐ identical plans, each effective for one calendar year for the following calendar years: _____, _____, _____, _____ and _____ unless notification to terminate one or more of these plans is given.

STEP 4

Read the special provisions and certification, enter the name of the designated representative, and sign and date.

Special Provisions

Emission Limitations

Each affected unit in an approved averaging plan is in compliance with the Acid Rain emission limitation for NO_x under the plan only if the following requirements are met:

(i) For each unit, the unit's actual annual average emission rate for the calendar year, in lb/mmBtu, is less than or equal to its alternative contemporaneous annual emission limitation in the averaging plan, and
(a) For each unit with an alternative contemporaneous emission limitation less stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year does not exceed the annual heat input limit in the averaging plan,
(b) For each unit with an alternative contemporaneous emission limitation more stringent than the applicable emission limitation in 40 CFR 76.5, 76.6, or 76.7, the actual annual heat input for the calendar year is not less than the annual heat input limit in the averaging plan, or
(ii) If one or more of the units does not meet the requirements of (i), the designated representative shall demonstrate, in accordance with 40 CFR 76.11(d)(1)(ii)(A) and (B), that the actual Btu-weighted annual average emission rate for the units in the plan is less than or equal to the Btu-weighted annual average rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations in 40 CFR 76.5, 76.6, or 76.7.
(iii) If there is a successful group showing of compliance under 40 CFR 76.11(d)(1)(ii)(A) and (B) for a calendar year, then all units in the averaging plan shall be deemed to be in compliance for that year with their alternative contemporaneous emission limitations and annual heat input limits under (i).

Liability

The owners and operators of a unit governed by an approved averaging plan shall be liable for any violation of the plan or this section at that unit or any other unit in the plan, including liability for fulfilling the obligations specified in part 77 of this chapter and sections 113 and 411 of the Act.

Termination

The designated representative may submit a notification to terminate an approved averaging plan, in accordance with 40 CFR 72.40(d), no later than October 1 of the calendar year for which the plan is to be terminated.

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 Barry G. Cunningham	
Signature BG Cunningham	Date 5/10/04

Jim Bridger Plant WY 8066

STEP 1

Continue the identification of units from Step 1, page 1, here.

Plant Name	State	ID#	(a) Emission Limitation	(b) Alt. Contemp. Emission Limitation	(c) Annual Heat Input Limit
Naughton	WY	3	0.40	0.45	30,352,758
Wyodak	WY	BW91	0.50	0.31	34,389,091
Carbon	UT	1	0.40	0.52	6,123,949
Carbon	UT	2	0.40	0.52	9,449,694

APPENDIX F

Compliance Assurance Monitoring (CAM) Plan

Compliance Assurance Monitoring Plan:
Electrostatic Precipitator for Particulate Matter Control
Jim Bridger Plant
Electric Utility Steam Generating Unit NADB #BW71

I. Background

A. Emissions Unit — NADB #BW71
Description: — Coal-Fired Boiler
Identification: — Source ID #1
Facility: — Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: — 40 CFR 60 Subpart D

Emission Limits:
Particulate Matter: — 0.10 lb/mmBTU heat input (2-hour fixed block average)

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

C. Control Technology

Electrostatic Precipitator

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table B-1. Exhaust stack opacity is monitored as the indicator of particulate collection and equipment performance.

Table B-1 Monitoring Approach

	Indicator
I. Indicator Measurement Approach	Opacity emissions from the boiler stack are monitored as the indicator of particulate emissions compliance.
	Opacity is measured directly by a continuous opacity monitor installed in the exhaust stack.
II. Indicator Range	An excursion is defined as a 3-hour fixed block average opacity value greater than 20% opacity. Excursions trigger a precipitator inspection, corrective actions and a reporting requirement.

Table B-1 Monitoring Approach (continued)

	Indicator
III. Performance Criteria A. Data Representativeness	Opacity is measured in the exhaust stack prior to discharge to atmosphere.
B. Verification of Operational Status	Not Applicable
C. QA/QC Practices and Criteria	The opacity monitor is installed and operated in compliance with 40 CFR 60 Appendix B, Performance Specification 1
D. Monitoring Frequency	Opacity is monitored continuously
Data Collection Procedures	Opacity is monitored and recorded by a data acquisition system.
Averaging Period	3 hour fixed block average

III. Background

The pollutant-specific emission unit at this source is the Jim Bridger Unit 1 boiler (Source ID #1). The emissions 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 an electrostatic precipitator (ESP), then through a flue gas de-sulfurization system (scrubber) and is discharged to the atmosphere via a tall stack. The electrostatic precipitator is a pollution control device used to remove particulate matter and fly ash entrained in the flue gas. The scrubber is used to remove sulfur dioxide (SO_2) from the flue gas stream. An opacity monitor is installed in the stack to measure flue gas opacity prior to discharge to the atmosphere.

IV. Rationale for Selection of Performance Indicators

Opacity is an indirect indicator of particulate 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 (electrostatic precipitator).

V. Rationale for Selection of Indicator Ranges

The indicator range for opacity is a 3-hour fixed block average opacity value of less-than-or-equal-to 20% opacity. This indicator range was selected following particulate matter testing performed on Jim Bridger Source ID No. 1 and from existing opacity limitation standards.

Particulate matter testing was performed on Unit 1 on October 22, 2002 to correlate particulate matter emissions with exhaust stack opacity values. Additionally, data from particulate testing performed on March 12, 2002 was also utilized to determine the indicator range value.

The 3-hour fixed block average opacity value is calculated from exhaust stack opacity measurements obtained at interval periods specified in 40 CFR 60, Appendix B, Performance Specification 1.

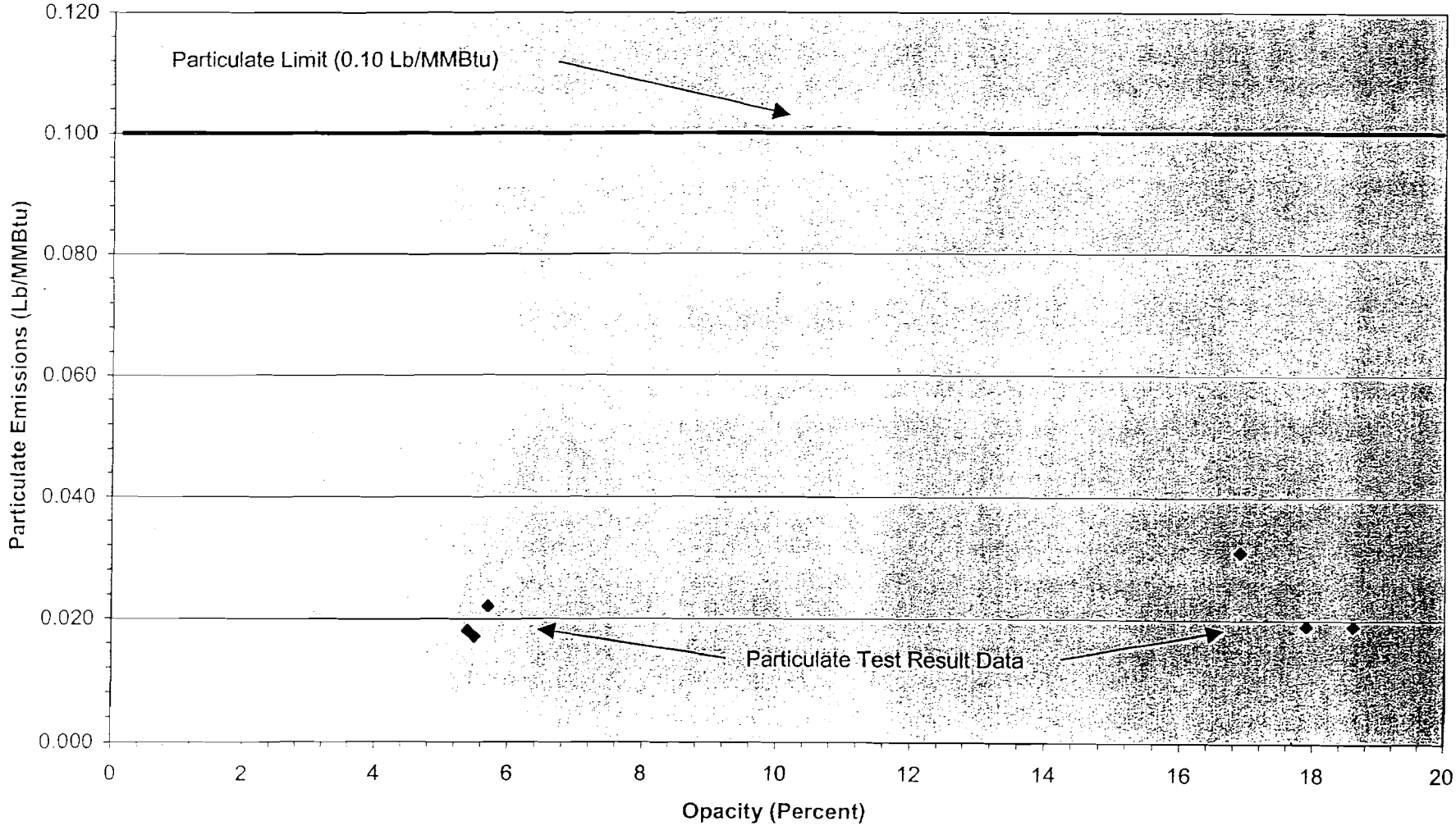
The maximum particulate emission value observed during the testing was 0.031 Lb/MMBtu, with a corresponding opacity value of 16.9%, and occurred on October 22, 2002. The maximum average opacity value observed during the testing was 18.6%, with a corresponding particulate emission value of 0.019 Lb/MMBtu, and also occurred during the testing of October 22, 2002. The particulate emissions standard for Unit 1 is 0.10 Lb/MMBtu, therefore during the testing the maximum recorded emissions were approximately 31 percent of the standard with a corresponding opacity value of 16.9%. Likewise, at the maximum average opacity value of 18.6%, particulate emissions were approximately 19% of the 0.10 Lb/MMBtu standard. As such, particulate testing indicates that emissions are substantially below the 0.10 Lb/MMBtu standard as stack emissions approach 20% opacity.

The following table contains a summary of the particulate test results for Jim Bridger Unit 1 that were used to determine the indicator range value of 20 percent opacity:

Jim Bridger Unit 1		
Date of Test	Particulate Test Results Lb/MMBtu	Average Opacity Percent
March 12, 2002 - Run 1	0.022	5.7
March 12, 2002 - Run 2	0.018	5.4
March 12, 2002 - Run 3	0.017	5.5
October 22, 2002 – Run 1	0.019	18.6
October 22, 2002 – Run 2	0.019	17.9
October 22, 2002 – Run 3	0.031	16.9

The graph shown on the following page contains the results of the particulate testing with particulate emissions, in units of Lb/MMBtu, graphed against measured opacity values.

Jim Bridger Unit 1 CAM Plan
Particulate Emissions vs. Opacity



Compliance Assurance Monitoring Plan:
Electrostatic Precipitator for Particulate Matter Control
Jim Bridger Plant
Electric Utility Steam Generating Unit NADB #BW72

I. Background

A. Emissions Unit Description: NADB #BW72 Coal-Fired Boiler
Identification: Source ID #2
Facility: Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: 40 CFR 60 Subpart D

Emission Limits:
Particulate Matter: 0.10 lb/mmBTU heat input
(2-hour fixed block average)

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

C. Control Technology

Electrostatic Precipitator

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table B-2. Exhaust stack opacity is monitored as the indicator of particulate collection and equipment performance.

Table B-2 Monitoring Approach

	Indicator
I. Indicator Measurement Approach	Opacity emissions from the boiler stack are monitored as the indicator of particulate emissions compliance.
	Opacity is measured directly by a continuous opacity monitor installed in the exhaust stack.
II. Indicator Range	An excursion is defined as a 3-hour average fixed block opacity value greater than 20% opacity. Excursions trigger a precipitator inspection, corrective actions and a reporting requirement.

Table B-2 Monitoring Approach (continued)

	Indicator
III. Performance Criteria	
A. Data Representativeness	Opacity is measured in the exhaust stack prior to discharge to atmosphere.
B. Verification of Operational Status	Not Applicable
C. QA/QC Practices and Criteria	The opacity monitor is installed and operated in compliance with 40 CFR 60 Appendix B, Performance Specification 1
D. Monitoring Frequency	Opacity is monitored continuously
Data Collection Procedures	Opacity is monitored and recorded by a data acquisition system.
Averaging Period	3 hour fixed block average

Monitoring Approach Justification

III. Background

The pollutant-specific emission unit at this source is the Jim Bridger Unit 2 boiler (Source ID #2). The emissions 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 an electrostatic precipitator (ESP), then through a flue gas de-sulfurization system (scrubber) and is discharged to the atmosphere via a tall stack. The electrostatic precipitator is a pollution control device used to remove particulate matter and fly ash entrained in the flue gas. The scrubber is used to remove sulfur dioxide (SO_2) from the flue gas stream. An opacity monitor is installed in the stack to measure flue gas opacity prior to discharge to the atmosphere.

IV. Rationale for Selection of Performance Indicators

Opacity is an indirect indicator of particulate 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 (electrostatic precipitator).

V. Rationale for Selection of Indicator Ranges

The indicator range for opacity is a 3-hour fixed block average opacity value of less-than-or-equal-to 20% opacity. This indicator range was selected following particulate matter testing performed on Jim Bridger Source ID No. 2 and from existing opacity limitation standards.

Particulate matter testing was performed on Unit 2 on October 22 and 24, 2002 to correlate particulate matter emissions with exhaust stack opacity values. Additionally, data from particulate testing performed on July 15, 2002 was also used to determine the indicator range value.

The 3-hour average fixed block opacity value is calculated from exhaust stack opacity measurements obtained at interval periods specified in 40 CFR 60, Appendix B, Performance Specification 1.

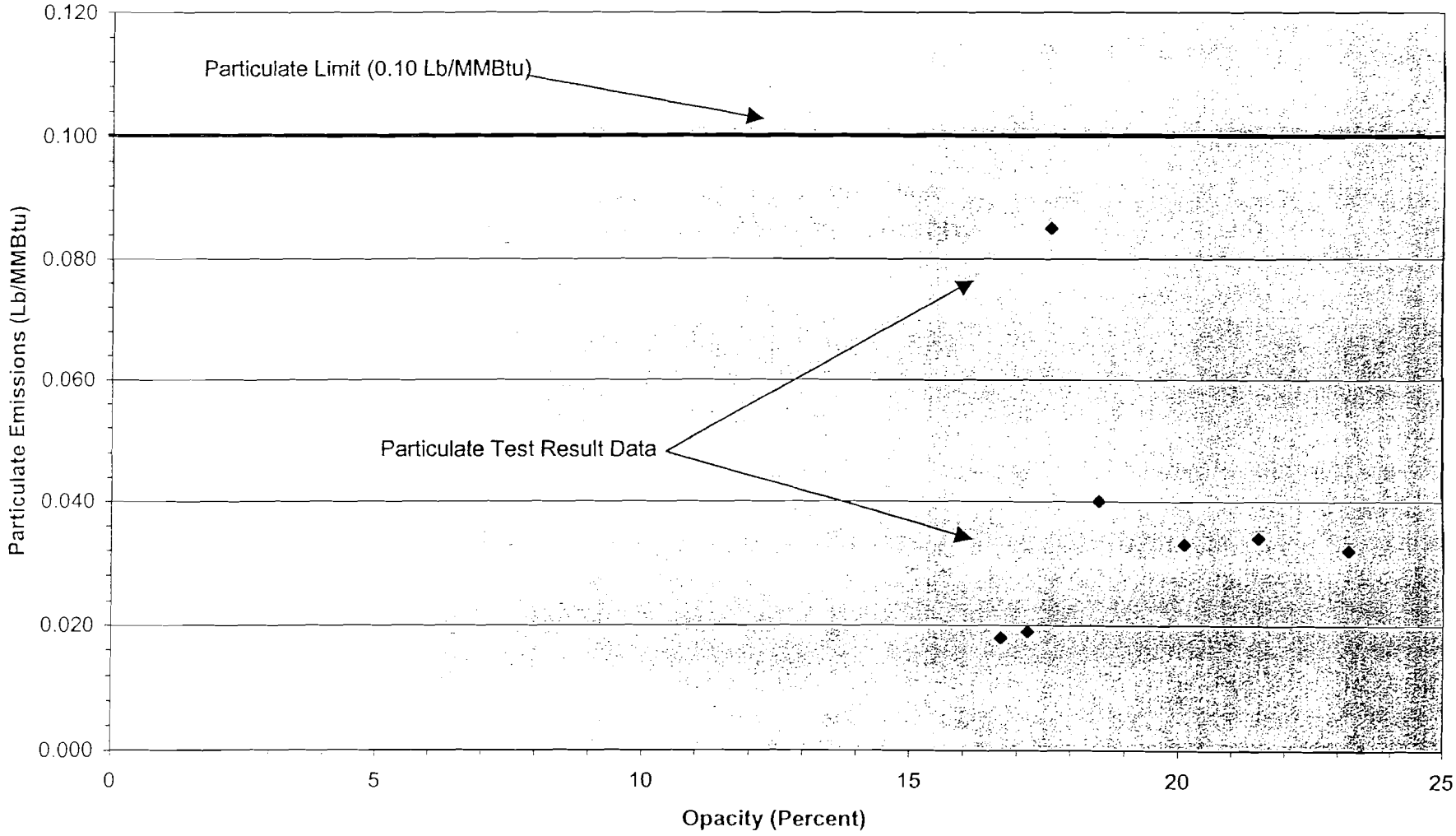
The maximum particulate emission value observed during the testing was 0.085 Lb/MMBtu, with a corresponding opacity value of 17.6%, and occurred on July 15, 2002. The maximum average opacity value observed during the testing was 23.2%, with a corresponding particulate emission value of 0.032 Lb/MMBtu, and occurred during the testing of October 24, 2002. The particulate emissions standard for Unit 2 is 0.10 Lb/MMBtu, therefore during the testing the maximum recorded emissions were approximately 85 percent of the standard with a corresponding opacity value of 17.6%. Likewise, at the maximum average opacity value of 23.2%, particulate emissions were approximately 32% of the 0.10 Lb/MMBtu standard. As such, particulate testing indicates that emissions are substantially below the 0.10 Lb/MMBtu standard as stack emissions approach 20% opacity.

The following table contains a summary of the particulate test results for Jim Bridger Unit 2 that were used to determine the indicator range value of 20 percent opacity:

Jim Bridger Unit 2		
Date of Test	Particulate Test Results Lb/MMBtu	Average Opacity Percent
July 15, 2002 – Run 1	0.085	17.6
July 15, 2002 – Run 2	0.040	18.5
July 15, 2002 – Run 3	0.019	17.2
October 22, 2002 – Run 1	0.033	20.1
October 22, 2002 – Run 2	0.034	21.5
October 22, 2002 – Run 3	0.018	16.7
October 24, 2002 – Run 4	0.032	23.2

The graph shown on the following page contains the results of the particulate testing with particulate emissions, in units of Lb/MMBtu, graphed against measured opacity values.

Jim Bridger Unit 2 CAM Plan
Particulate Emissions vs. Opacity



Compliance Assurance Monitoring Plan:
Electrostatic Precipitator for Particulate Matter Control
Jim Bridger Plant
Electric Utility Steam Generating Unit NADB #BW73

I. Background

A. Emissions Unit Description: NADB #BW73 Coal-Fired Boiler
Identification: Source ID #3
Facility: Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: 40 CFR 60 Subpart D

Emission Limits:
Particulate Matter: 0.10 lb/mmBTU heat input
(2-hour fixed block average)

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

C. Control Technology

Electrostatic Precipitator

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table B-3. Exhaust stack opacity is monitored as the indicator of particulate collection and equipment performance.

Table B-3 Monitoring Approach

	Indicator
I. Indicator Measurement Approach	Opacity emissions from the boiler stack are monitored as the indicator of particulate emissions compliance.
	Opacity is measured directly by a continuous opacity monitor installed in the exhaust stack.
II. Indicator Range	An excursion is defined as a 3-hour fixed block average opacity value greater than 20% opacity. Excursions trigger a precipitator inspection, corrective actions and a reporting requirement.

Table B-3 Monitoring Approach (continued)

	Indicator
III. Performance Criteria A. Data Representativeness	Opacity is measured in the exhaust stack prior to discharge to atmosphere.
B. Verification of Operational Status	Not Applicable
C. QA/QC Practices and Criteria	The opacity monitor is installed and operated in compliance with 40 CFR 60 Appendix B, Performance Specification 1
D. Monitoring Frequency	Opacity is monitored continuously
Data Collection Procedures	Opacity is monitored and recorded by a data acquisition system.
Averaging Period	3 hour fixed block average

12-16-2002 31012

Monitoring Approach Justification

III. Background

The pollutant-specific emission unit at this source is the Jim Bridger Unit 3 boiler (Source ID #3). The emissions 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 an electrostatic precipitator (ESP), then through a flue gas de-sulfurization system (scrubber) and is discharged to the atmosphere via a tall stack. The electrostatic precipitator is a pollution control device used to remove particulate matter and fly ash entrained in the flue gas. The scrubber is used to remove sulfur dioxide (SO_2) from the flue gas stream. An opacity monitor is installed in the stack to measure flue gas opacity prior to discharge to the atmosphere.

IV. Rationale for Selection of Performance Indicators

Opacity is an indirect indicator of particulate 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 (electrostatic precipitator).

V. Rationale for Selection of Indicator Ranges

The indicator range for opacity is a 3-hour fixed block average opacity value of less-than-or-equal-to 20% opacity. This indicator range was selected following particulate matter testing performed on Jim Bridger Source ID No. 3 and from existing opacity limitation standards.

Particulate matter testing was performed on Unit 3 on October 23, 2002 to correlate particulate matter emissions with exhaust stack opacity values. Additionally, data from particulate testing performed on March 13, 2002 was also utilized to determine the indicator range value.

The 3-hour fixed block average opacity value is calculated from exhaust stack opacity measurements obtained at interval periods specified in 40 CFR 60, Appendix B, Performance Specification 1.

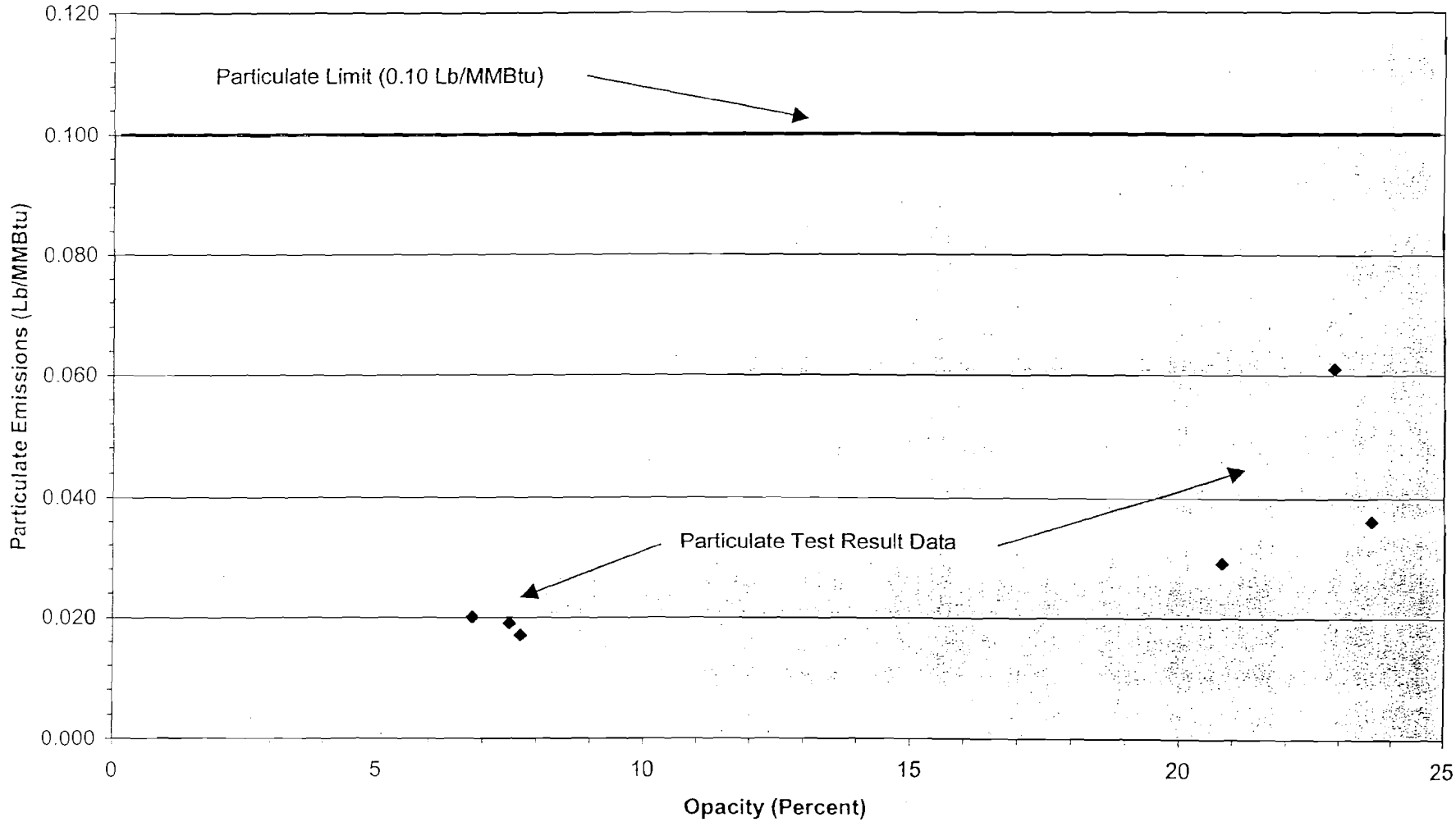
The maximum particulate emission value observed during the testing was 0.061 Lb/MMBtu, with a corresponding opacity value of 22.9%, and occurred on October 23, 2002. The maximum average opacity value observed during the testing was 23.6%, with a corresponding particulate emission value of 0.036 Lb/MMBtu, and also occurred during the testing of October 23, 2002. The particulate emissions standard for Unit 3 is 0.10 Lb/MMBtu, therefore during the testing the maximum recorded emissions were approximately 61 percent of the standard with a corresponding opacity value of 22.9%. Likewise, at the maximum average opacity value of 23.6%, particulate emissions were approximately 36% of the 0.10 Lb/MMBtu standard. As such, particulate testing indicates that emissions are substantially below the 0.10 Lb/MMBtu standard as stack emissions approach 20% opacity.

The following table contains a summary of the particulate test results for Jim Bridger Unit 3 that were used to determine the indicator range value of 20 percent opacity:

Jim Bridger Unit 3		
Date of Test	Particulate Test Results Lb/MMBtu	Average Opacity Percent
March 13, 2002 - Run 1	0.020	6.8
March 13, 2002 - Run 2	0.019	7.5
March 13, 2002 - Run 3	0.017	7.7
October 23, 2002 – Run 1	0.029	20.8
October 23, 2002 – Run 2	0.036	23.6
October 23, 2002 – Run 4	0.061	22.9

The graph shown on the following page contains the results of the particulate testing with particulate emissions, in units of Lb/MMBtu, graphed against measured opacity values.

Jim Bridger Unit 3 CAM Plan
Particulate Emissions vs. Opacity



Compliance Assurance Monitoring Plan:
Electrostatic Precipitator for Particulate Matter Control
Jim Bridger Plant
Electric Utility Steam Generating Unit NADB #BW74

I. Background

A. Emissions Unit — NADB #BW74
Description: — Coal-Fired Boiler
Identification: — Source ID #4
Facility: — Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: — 40 CFR 60 Subpart D

Emission Limits:
Particulate Matter: — 0.10 lb/mmBTU heat input not to exceed 502 lbs/hr

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

C. Control Technology

Electrostatic Precipitator

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table B-4. Exhaust stack opacity is monitored as the indicator of particulate collection and equipment performance.

Table B-4 Monitoring Approach

	Indicator
I. Indicator Measurement Approach	Boiler flue gas opacity emissions are monitored as the indicator of particulate emissions compliance.
	Opacity is measured directly by two continuous opacity monitors installed in the flue gas ducts.
II. Indicator Range	An excursion is defined as a 3-hour fixed block average opacity value greater than 30% opacity. Excursions trigger a precipitator inspection, corrective actions and a reporting requirement.

Table B-4 Monitoring Approach (continued)

	Indicator
III. Performance Criteria A. Data Representativeness	Opacity is measured in the flue gas ducts prior to discharge to atmosphere.
B. Verification of Operational Status	Not Applicable
C. QA/QC Practices and Criteria	The opacity monitors are installed and operated in compliance with 40 CFR 60 Appendix B, Performance Specification 1
D. Monitoring Frequency	Opacity is monitored continuously
Data Collection Procedures	Opacity is monitored and recorded by a data acquisition system.
Averaging Period	3 hour fixed block average

Monitoring Approach Justification

III. Background

The pollutant-specific emission unit at this source is the Jim Bridger Unit 4 boiler (Source ID #4). The emissions 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 an electrostatic precipitator (ESP), then through a flue gas de-sulfurization system (scrubber) and is discharged to the atmosphere via a tall stack. The electrostatic precipitator is a pollution control device used to remove particulate matter and fly ash entrained in the flue gas. The scrubber is used to remove sulfur dioxide (SO_2) from the flue gas stream. Two opacity monitors are installed in flue gas ducts located between the ESP and the scrubber that measure flue gas opacity prior to discharge to the atmosphere.

IV. Rationale for Selection of Performance Indicators

Opacity is an indirect indicator of particulate 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 (electrostatic precipitator).

V. Rationale for Selection of Indicator Ranges

The indicator range for opacity is a 3-hour fixed block average opacity value of less-than-or-equal-to 30% opacity. This indicator range was selected following particulate matter testing performed on Jim Bridger Source ID No. 4 and from existing opacity limitation standards.

Particulate matter testing was performed on Unit 4 on October 23, 2002 to correlate particulate matter emissions with exhaust duct opacity values. The 3-hour fixed block average opacity value is determined as the average of the two flue gas duct opacity values. Additionally, data from particulate testing performed on July 16, 2002 was also used to determine the indicator range value.

The 3-hour fixed block average opacity value is calculated from flue gas duct opacity measurements obtained at interval periods specified in 40 CFR 60, Appendix B, Performance Specification 1. The two flue gas duct opacity monitor measurements are averaged to obtain the average opacity value.

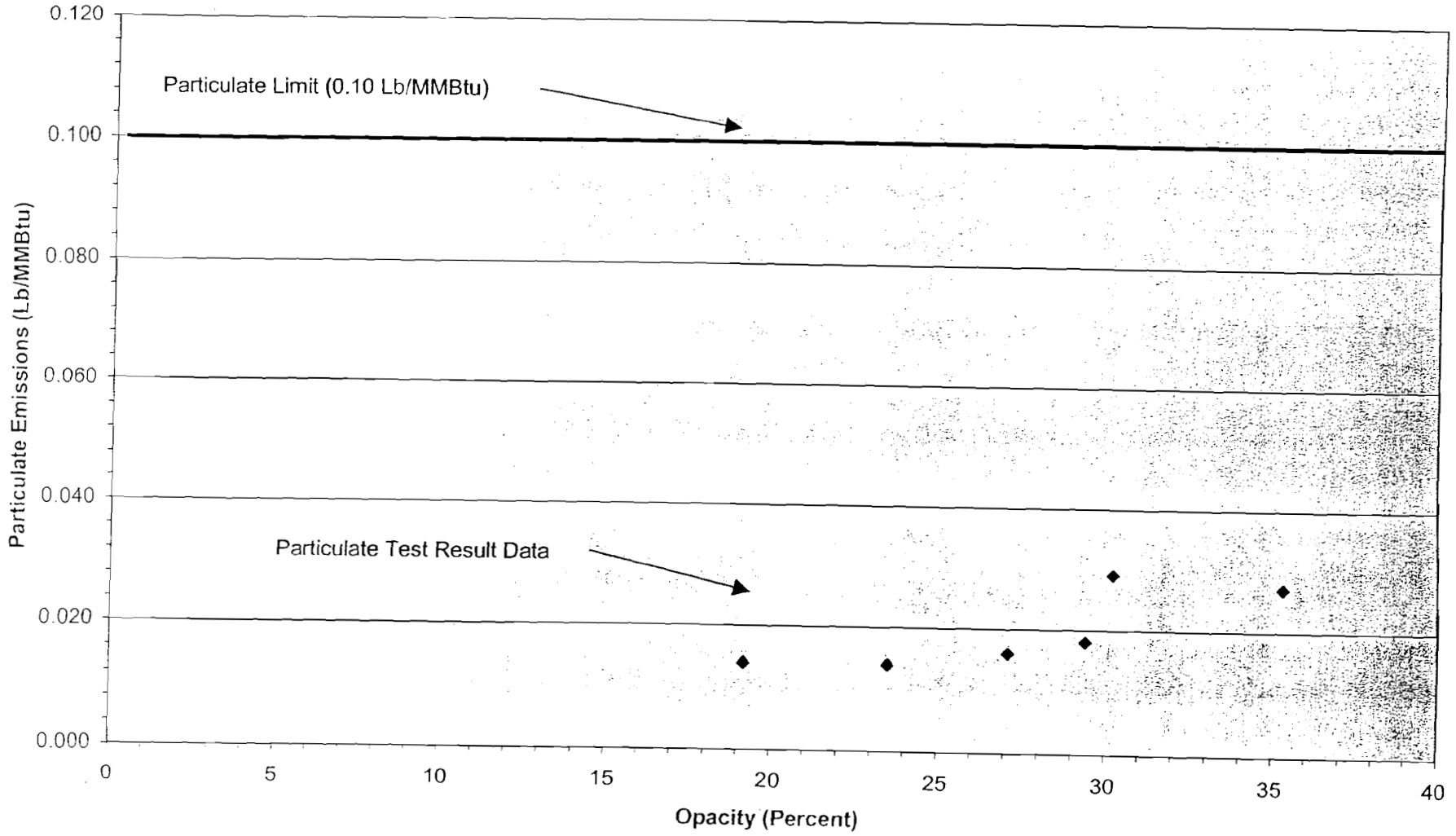
The maximum particulate emission value observed during the testing was 0.029 Lb/MMBtu, with a corresponding opacity value of 30.2%, and occurred on October 23, 2002. The maximum average opacity value observed during the testing was 35.3%, with a corresponding particulate emission value of 0.027 Lb/MMBtu, and also occurred during the testing of October 23, 2002. The particulate emissions standard for Unit 4 is 0.10 Lb/MMBtu, therefore during the testing the maximum recorded emissions were approximately 29 percent of the standard with a corresponding opacity value of 30.2%. Likewise, at the maximum average opacity value of 35.3%, particulate emissions were approximately 27% of the 0.10 Lb/MMBtu standard. As such, particulate testing indicates that emissions are substantially below the 0.10 Lb/MMBtu standard as precipitator exhaust duct flue gas approaches measured values of 30% opacity.

The following table contains a summary of the particulate test results for Jim Bridger Unit 4 that were used to determine the indicator range value of 30 percent opacity:

Jim Bridger Unit 4		
Date of Test	Particulate Test Results Lb/MMBtu	Average Opacity Percent
July 16, 2002 - Run 1	0.014	19.2
July 16, 2002 - Run 2	0.014	23.5
July 16, 2002 - Run 3	0.016	27.1
October 23, 2002 – Run 1	0.029	30.2
October 23, 2002 – Run 2	0.018	29.4
October 23, 2002 – Run 4	0.027	35.3

The graph shown on the following page contains the results of the particulate testing with particulate emissions, in units of Lb/MMBtu, graphed against measured opacity values.

Jim Bridger Unit 4 CAM Plan
Particulate Emissions vs. Opacity



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

I. Background

A. Emissions Unit Description: 01 Secondary Crusher Building Transfer Points
Identification: Fabric Filter Baghouse
Facility: Source ID #11
Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: WAQSR Chapter 3, Section 2 and Chapter 6, Section 2, Permits MD-307 and OP-267

Emission Limits:
Particulate Matter: 2.42 lbs. per hour

Monitoring Requirements: Weekly Observations

C. Control Technology

Fabric Filter Baghouse

II. 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 six-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 01 Secondary Crusher Building Transfer Points, emission source ID No. 11. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Jim Bridger Plant.

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
Jim Bridger Plant

I. Background

A. Emissions Unit Description: Unit 1 Conveyor Transfer Points and Silo Vent
Identification: Fabric Filter Baghouse
Facility: Source ID #13
Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: WAQSR Chapter 3, Section 2 and Chapter 6, Section 2.
Permits MD-307 and OP-267

Emission Limits:
Particulate Matter: 2.23 lbs. per hour

Monitoring Requirements: Weekly Observations

C. Control Technology

Fabric Filter Baghouse

II. 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. 13 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 six-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 Unit 1 Conveyor Transfer Points and Silo Vent, emission source ID No. 13. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Jim Bridger Plant.

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
Jim Bridger Plant

I. Background

A. Emissions Unit Description: Unit 2 Conveyor Transfer Points and Silo Vent
Identification: Fabric Filter Baghouse
Facility: Source ID #14
Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: WAQSR Chapter 3, Section 2 and Chapter 6, Section 2, Permits MD-307 and OP-267

Emission Limits:
Particulate Matter: 2.74 lbs. per hour

Monitoring Requirements: Weekly Observations

C. Control Technology

Fabric Filter Baghouse

II. 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. 14 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 six-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 Unit 2 Conveyor Transfer Points and Silo Vent, emission source ID No. 14. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Jim Bridger Plant.

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
Jim Bridger Plant

I. Background

A. Emissions Unit Description: Unit 3 Conveyor Transfer Points and Silo Vent
Identification: Fabric Filter Baghouse
Facility: Source ID #15
Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: WAQSR Chapter 3, Section 2 and Chapter 6, Section 2.
Permits MD-307 and OP-267

Emission Limits:
Particulate Matter: 2.74 lbs. per hour

Monitoring Requirements: Weekly Observations

C. Control Technology

Fabric Filter Baghouse

II. 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. 15 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 six-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 Unit 3 Conveyor Transfer Points and Silo Vent, emission source ID No. 15. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Jim Bridger Plant.

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
Jim Bridger Plant

I. Background

A. Emissions Unit Description: 91 Secondary Crusher Building Transfer Points
Identification: Fabric Filter Baghouse
Facility: Source ID #16
Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: WAQSR Chapter 3, Section 2 and Chapter 6, Section 2, Permits MD-307 and OP-267

Emission Limits:
Particulate Matter: 1.03 lbs. per hour

Monitoring Requirements: Weekly Observations

C. Control Technology

Fabric Filter Baghouse

II. 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. 16 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 six-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 91 Secondary Crusher Building Transfer Points, emission source ID No. 16. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Jim Bridger Plant.

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
Jim Bridger Plant

I. Background

A. Emissions Unit Description: Unit 4 Conveyor Transfer Points and Silo Vent
Identification: Fabric Filter Baghouse
Facility: Source ID #17
Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: WAQSR Chapter 3, Section 2 and Chapter 6, Section 2.
Permits MD-307 and OP-267

Emission Limits:
Particulate Matter: 2.74 lbs. per hour

Monitoring Requirements: Weekly Observations

C. Control Technology

Fabric Filter Baghouse

II. 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. 17 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 six-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 Unit 4 Conveyor Transfer Points and Silo Vent, emission source ID No. 17. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Jim Bridger Plant.

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
Jim Bridger Plant

I. Background

A. Emissions Unit Description: 02 Secondary Crusher Building Transfer Points
Identification: Fabric Filter Baghouse
Facility: Source ID #18
Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: WAQSR Chapter 3, Section 2 and Chapter 6, Section 2, Permits MD-307 and OP-267

Emission Limits:
Particulate Matter: 0.02 grains per acf of exhaust not to exceed 0.26 lbs. per hour

Monitoring Requirements: Weekly Observations

C. Control Technology

Fabric Filter Baghouse

II. 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. 18 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 six-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 02 Secondary Crusher Building Transfer Points, emission source ID No. 18. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Jim Bridger Plant.

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
Jim Bridger Plant

I. Background

A. Emissions Unit Description: Railcar/Truck Unloading Transfer Points
Identification: Fabric Filter Baghouse
Facility: Source ID #19
Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: WAQSR Chapter 3, Section 2 and Chapter 6, Section 2, Permits MD-307 and OP-267

Emission Limits:
Particulate Matter: 0.01 grains per acf of exhaust not to exceed 3.50 lbs. per hour

Monitoring Requirements: Weekly Observations

C. Control Technology

Fabric Filter Baghouse

II. 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. 19 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 six-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 Railcar/Truck Unloading Transfer Points, emission source ID No. 19. The baghouse is used to reduce fugitive emissions resulting from coal unloading operations at the Jim Bridger Plant.

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
Jim Bridger Plant

I. Background

A. Emissions Unit Description: Overland Conveyor Interface Building Transfer Points
Identification: Fabric Filter Baghouse
Facility: Source ID #20
Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: WAQSR Chapter 3, Section 2 and Chapter 6, Section 2, Permits MD-307 and OP-267

Emission Limits:
Particulate Matter: 0.01 grains per acf of exhaust not to exceed 0.90 lbs. per hour

Monitoring Requirements: Weekly Observations

C. Control Technology

Fabric Filter Baghouse

II. 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. 20 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 six-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 Overland Interface Building Transfer Points, emission source ID No. 20. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Jim Bridger Plant.

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
Jim Bridger Plant

I. Background

A. Emissions Unit Description: 02 Reclaim Tunnel Transfer Points
Fabric Filter Baghouse
Identification: Source ID #21
Facility: Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: WAQSR Chapter 3, Section 2 and Chapter 6, Section 2, Permits MD-307 and OP-267

Emission Limits:
Particulate Matter: 0.01 grains per acf of exhaust not to exceed 1.29 lbs. per hour

Monitoring Requirements: Weekly Observations

C. Control Technology

Fabric Filter Baghouse

II. 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. 21 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 six-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 02 Reclaim Tunnel Transfer Points, emission source ID No. 21. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Jim Bridger Plant.

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
Jim Bridger Plant

I. Background

A. Emissions Unit Description: 02A Reclaim Tunnel Transfer Points
Identification: Fabric Filter Baghouse
Facility: Source ID #22
Jim Bridger Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.: WAQSR Chapter 3, Section 2 and Chapter 6, Section 2, Permits MD-307 and OP-267

Emission Limits:
Particulate Matter: 0.01 grains per acf of exhaust not to exceed 1.29 lbs. per hour

Monitoring Requirements: Weekly Observations

C. Control Technology

Fabric Filter Baghouse

II. 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. 22 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 six-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 02A Reclaim Tunnel Transfer Points, emission source ID No. 22. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Jim Bridger Plant.

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 G

WAQSR Chapter 7, Section 3 Compliance Assurance Monitoring (CAM)

(a) Definitions. For purposes of this section:

"Act" means the Clean Air Act, as amended by Pub.L. 101-549, 42 U.S.C. 7401, et seq.

"Applicable requirement" means all of the following as they apply to emissions units at a source subject to this section (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):

(i) Any standard or other requirement provided for in the Wyoming implementation plan approved or promulgated by the EPA under title I of the Act that implements the relevant requirements of the Act, including any revisions to the plan promulgated in 40 CFR part 52;

(ii) Any standards or requirements in the WAQSR which are not a part of the approved Wyoming implementation plan and are not federally enforceable;

(iii) 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;

(iv) Any standard or other requirement promulgated under section 111 of the Act, including section 111(d) and Chapter 5, Section 2 of the WAQSR;

(v) 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 the EPA and the State pursuant to section 112 of the Act;

(vi) Any standard or other requirement of the acid rain program under title IV of the Act or the regulations promulgated thereunder;

(vii) Any requirements established pursuant to section 504(b) or section 114(a)(3) of the Act concerning enhanced monitoring and compliance certifications;

(viii) Any standard or other requirement governing solid waste incineration, under section 129 of the Act;

(ix) 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);

(x) 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;

(xi) 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

(xii) Any state ambient air quality standard or increment or visibility requirement of the WAQSR.

(xiii) Nothing under Chapter 6, Section 3(b)(v) shall be construed as affecting the allowance program and Phase II compliance schedule under the acid rain provision of title IV of the Act.

"Capture system" means the equipment (including but not limited to hoods, ducts, fans, and booths) used to contain, capture and transport a pollutant to a control device.

"Continuous compliance determination method" means a method, specified by the applicable standard or an applicable permit condition, which:

(i) Is used to determine compliance with an emission limitation or standard on a continuous basis, consistent with the averaging period established for the emission limitation or standard; and

(ii) Provides data either in units of the standard or correlated directly with the compliance limit.

"Control device" means equipment, other than inherent process equipment, that is used to destroy or remove air pollutant(s) prior to discharge to the atmosphere. The types of equipment that may commonly be used as control devices include, but are not limited to, fabric filters, mechanical collectors, electrostatic precipitators, inertial separators, afterburners, thermal or catalytic incinerators, adsorption devices (such as carbon beds), condensers, scrubbers (such as wet collection and gas absorption devices), selective catalytic or non-catalytic reduction systems, flue gas recirculation systems, spray dryers, spray towers, mist eliminators, acid plants, sulfur recovery plants, injection systems (such as water, steam, ammonia, sorbent or limestone injection), and combustion devices independent of the particular process being conducted at an emissions unit (e.g., the destruction of emissions achieved by venting process emission streams to flares, boilers or process heaters). For purposes of this part, a control device does not include passive control measures that act to prevent pollutants from forming, such as the use of seals, lids, or roofs to prevent the release of pollutants, use of low-polluting fuel or feedstocks, or the use of combustion or other process design features or characteristics. If an applicable requirement establishes that particular equipment which otherwise meets this definition of a control device does not constitute a control device as applied to a particular pollutant-specific emissions unit, then that definition shall be binding for purposes of this part.

"Data" means the results of any type of monitoring or method, including the results of instrumental or non-instrumental monitoring, emission calculations, manual sampling procedures, recordkeeping procedures, or any other form of information collection procedure used in connection with any type of monitoring or method.

"Emission limitation or standard" means any applicable requirement that constitutes an emission limitation, emission standard, standard of performance or means of emission limitation as defined under the Act. An emission limitation or standard may be expressed in terms of the pollutant, expressed either as a specific quantity, rate or concentration of emissions (e.g., pounds of SO_2 per hour, pounds of SO_2 per million British thermal units of fuel input, kilograms of VOC per liter of applied coating solids, or parts per million by volume of SO_2) or as the relationship of uncontrolled to controlled emissions (e.g., percentage capture and destruction efficiency of VOC or percentage reduction of SO_2). An emission limitation or standard may also be expressed either as a work practice, process or control device parameter, or other form of specific design, equipment, operational, or operation and maintenance requirement. For purposes of this part, an emission limitation or standard shall not include general operation requirements that an owner or operator may be required to meet, such as requirements to obtain a permit, to operate and maintain sources in accordance with good air pollution control practices, to develop and maintain a malfunction abatement plan, to keep records, submit reports, or conduct monitoring.

"Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under section 112(b) of the Act. This term is not meant to alter or affect the definition of the term "unit" for purposes of title IV of the Act.

"Exceedence" shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring.

"Excursion" shall mean a departure from an indicator range established for monitoring under this part, consistent with any averaging period specified for averaging the results of the monitoring.

"Inherent process equipment" means equipment that is necessary for the proper or safe functioning of the process, or material recovery equipment that the owner or operator documents is installed and operated primarily for purposes other than compliance with air pollution regulations. Equipment that must be

operated at an efficiency higher than that achieved during normal process operations in order to comply with the applicable emission limitation or standard is not inherent process equipment. For the purposes of this part, inherent process equipment is not considered a control device.

"Major source" means any stationary source (or any group of stationary sources that are located on one or more contiguous or adjacent properties, and are under common control of the same person or persons under common control) belonging to a single major industrial grouping and that is described in paragraphs (i), (ii), or (iii) of this definition. For the purpose of defining "major source", a stationary source or group of stationary sources shall be considered part of a single industrial grouping if all of the pollutant emitting activities at such source or group of sources on contiguous or adjacent properties belong to the same Major Group (i.e., all have the same two-digit code) as described in the Standard Industrial Classification Manual, 1987.

(i) A major source under section 112 of the Act, which is defined as:

(A) For pollutants other than radionuclides, any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, in the aggregate, 10 tons per year (tpy) or more of any hazardous air pollutant which has been listed pursuant to section 112(b) of the Act, 25 tpy or more of any combination of such hazardous air pollutants, or such lesser quantity as the EPA may establish by rule. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not such units are in a contiguous area or under common control, to determine whether such units or stations are major sources; or

(B) For radionuclides, "major source" shall have the meaning specified by the EPA by rule.

(ii) A major stationary source of air pollutants, as defined in section 302 of the Act, that directly emits or has the potential to emit, 100 tpy or more of any air pollutant (including any major source of fugitive emissions of any such pollutant, as determined by rule by the EPA). Emissions of air pollutants regulated solely due to section 112(r) of the Act shall not be considered in determining whether a source is a "major source" for purposes of Chapter 6, Section 3 applicability. The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source unless the source belongs to one of the following categories of stationary sources:

(A) Stationary sources listed in Chapter 6, Section 4(a)(i)(a) of the WAQSR; or

(B) Any other stationary source category, which as of August 7, 1980 is being regulated under section 111 or 112 of the Act.

(iii) A major stationary source as defined in part D of title I of the Act (in reference to sources located in non-attainment areas).

"Monitoring" means any form of collecting data on a routine basis to determine or otherwise assess compliance with emission limitations or standards. Recordkeeping may be considered monitoring where such records are used to determine or assess compliance with an emission limitation or standard (such as records of raw material content and usage, or records documenting compliance with work practice requirements). The conduct of compliance method tests, such as the procedures in 40 CFR part 60, Appendix A, on a routine periodic basis may be considered monitoring (or as a supplement to other monitoring), provided that requirements to conduct such tests on a one-time basis or at such times as a regulatory authority may require on a non-regular basis are not considered monitoring requirements for purposes of this paragraph. Monitoring may include one or more than one of the following data collection techniques, where appropriate for a particular circumstance:

(i) Continuous emission or opacity monitoring systems;

(ii) Continuous process, capture system, control device or other relevant parameter monitoring systems or procedures, including a predictive emission monitoring system;

(iii) Emission estimation and calculation procedures (e.g., mass balance or stoichiometric calculations);

(iv) Maintenance and analysis of records of fuel or raw materials usage;

(v) Recording results of a program or protocol to conduct specific operation and maintenance procedures;

(vi) Verification of emissions, process parameters, capture system parameters, or control device parameters using portable or in situ measurement devices;

(vii) Visible emission observations;

(viii) Any other form of measuring, recording, or verifying on a routine basis emissions, process parameters, capture system parameters, control device parameters or other factors relevant to assessing compliance with emission limitations or standards.

"Operating permit" means any permit or group of permits covering a source under Chapter 6, Section 3, Operating Permits that is issued, renewed, amended, or revised pursuant to Chapter 6, Section 3.

"Operating permit application" shall mean an application (including any supplement to a previously submitted application) that is submitted by the owner or operator in order to obtain a Chapter 6, Section 3, operating permit.

"Owner or operator" means any person who owns, leases, operates, controls or supervises a stationary source subject to this part.

"Pollutant-specific emissions unit" means an emissions unit considered separately with respect to each regulated air pollutant.

"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 the 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.

"Predictive emission monitoring system (PEMS)" means a system that uses process and other parameters as inputs to a computer program or other data reduction system to produce values in terms of the applicable emission limitation or standard.

"Regulated air pollutant" means the following:

(i) Nitrogen oxides (NO_x) or any volatile organic compound;

(ii) Any pollutant for which a national ambient air quality standard has been promulgated;

(iii) Any pollutant that is subject to any standard established in Chapter 5, Section 2 of the WAQSR or section 111 of the Act;

(iv) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act; or

(v) 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:

(A) Any pollutant subject to requirements under section 112(j) of the Act. If the 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(c) of the Act; and

(B) 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.

(vi) 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 Chapter 6, Section 3, Operating Permits.

"Stationary source" means any building, structure, facility, or installation that emits or may emit any regulated air pollutant or any pollutant listed under section 112(b) of the Act.

(b) Applicability.

(i) General applicability. Except for backup utility units that are exempt under paragraph (ii)(B) of this subsection (b), the requirements of this part shall apply to a pollutant-specific emissions unit at a major source that is required to obtain a Chapter 6, Section 3, operating permit if the unit satisfies all of the following criteria:

(A) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under paragraph (ii)(A) of this subsection (b);

(B) The unit uses a control device to achieve compliance with any such emission limitation or standard; and

(C) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. For purposes of this paragraph, "potential pre-control device emissions" shall have the same meaning as "potential to emit", as defined in Chapter 7, Section 3(a), except that emission reductions achieved by the applicable control device shall not be taken into account.

(ii) Exemptions.

(A) Exempt emission limitations or standards. The requirements of this part shall not apply to any of the following emission limitations or standards:

(I) Emission limitations or standards proposed by the EPA Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act;

(II) Stratospheric ozone protection requirements under title VI of the Act;

(III) Acid Rain Program requirements pursuant to sections 404, 405, 406, 407(a), 407(b), or 410 of the Act;

(IV) Emission limitations or standards or other applicable requirements that apply solely under an emissions trading program approved or promulgated by the Administrator under the Act that allows for trading emissions within a source or between sources;

(V) A federally enforceable emissions cap included in the Chapter 6, Section 3 operating permit;

(VI) Emission limitations or standards for which a Chapter 6, Section 3, operating permit specifies a continuous compliance determination method, as defined in Chapter 7, Section 3(a). The exemption provided in (b)(ii)(A)(VI) of this section shall not apply if the applicable compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device (such as a surface coating line controlled by an incinerator for which continuous compliance is determined by calculating emissions on the basis of coating records and an assumed control device efficiency factor based on an initial performance test; in this example, this part would apply to the control device and capture system, but not to the remaining elements of the coating line, such as raw material usage).

(B) Exemption for backup utility power emissions units. The requirements of this part shall not apply to a utility unit, as defined in §72.2 of Chapter 11, Section 2(b) that is municipally-owned if the owner or operator provides documentation in a Chapter 6, Section 3, operating permit application that:

(I) The utility unit is exempt from all monitoring requirements in Chapter 11, Section 2(b), Acid Rain, Continuous emission monitoring (including the appendices thereto);

(II) The utility unit is operated for the sole purpose of providing electricity during periods of peak electrical demand or emergency situations and will be operated consistent with that purpose throughout the Chapter 6, Section 3, operating permit term. The owner or operator shall provide historical operating data and relevant contractual obligations to document that this criterion is satisfied; and

(III) The actual emissions from the utility unit, based on the average annual emissions over the last three calendar years of operation (or such shorter time period that is available for units with fewer than three years of operation) are less than 50 percent of the amount in tons per year required for a source to be classified as a major source and are expected to remain so.

(c) Monitoring design criteria.

(i) General criteria. To provide a reasonable assurance of compliance with emission limitations or standards for the anticipated range of operations at a pollutant-specific emissions unit, monitoring under this part shall meet the following general criteria:

(A) The owner or operator shall design the monitoring to obtain data for one or more indicators of emission control performance for the control device, any associated capture system and, if necessary to satisfy paragraph (c)(i)(B) of this section, processes at a pollutant-specific emissions unit. Indicators of performance may include, but are not limited to, direct or predicted emissions (including visible emissions or opacity), process and control device parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities conducted by the owner or operator.

(B) The owner or operator shall establish an appropriate range(s) or designated condition(s) for the selected indicator(s) such that operation within the ranges provides a reasonable assurance of ongoing compliance with emission limitations or standards for the anticipated range of operating conditions. Such range(s) or condition(s) shall reflect the proper operation and maintenance of the control device (and associated capture system), in accordance with applicable design properties, for minimizing emissions over the anticipated range of operating conditions at least to the level required to achieve compliance with the applicable requirements. The reasonable assurance of compliance will be assessed by maintaining performance within the indicator range(s) or designated condition(s). The ranges shall be established in accordance with the design and performance requirements in this section and documented in accordance with the requirements in Chapter 7, Section 3(d). If necessary to assure that the control device and associated capture system can satisfy this criterion, the owner or operator shall monitor appropriate process operational parameters (such as total throughput where necessary to stay within the rated capacity for a control device). In addition, unless specifically stated otherwise by an applicable requirement, the owner or operator shall monitor indicators to detect any bypass of the control device (or capture system) to the atmosphere, if such bypass can occur based on the design of the pollutant-specific emissions unit.

(C) The design of indicator ranges or designated conditions may be:

(I) Based on a single maximum or minimum value if appropriate (e.g., maintaining condenser temperatures a certain number of degrees below the condensation temperature of the applicable compound(s) being processed) or at multiple levels that are relevant to distinctly different operating conditions (e.g., high versus low load levels);

(II) Expressed as a function of process variables (e.g., an indicator range expressed as minimum to maximum pressure drop across a venturi throat in a particulate control scrubber);

(III) Expressed as maintaining the applicable parameter in a particular operational status or designated condition (e.g., position of a damper controlling gas flow to the atmosphere through a by-pass duct);

(IV) Established as interdependent between more than one indicator.

(ii) Performance criteria. The owner or operator shall design the monitoring to meet the following performance criteria:

(A) Specifications that provide for obtaining data that are representative of the emissions

or parameters being monitored (such as detector location and installation specifications, if applicable);

(B) For new or modified monitoring equipment, verification procedures to confirm the operational status of the monitoring prior to the date by which the owner or operator must conduct monitoring under this part as specified in Chapter 7, Section 3(g)(i). The owner or operator shall consider the monitoring equipment manufacturer's requirements or recommendations for installation, calibration, and start-up operation;

(C) Quality assurance and control practices that are adequate to ensure the continuing validity of the data. The owner or operator shall consider manufacturer recommendations or requirements applicable to the monitoring in developing appropriate quality assurance and control practices;

(D) Specifications for the frequency of conducting the monitoring, the data collection procedures that will be used (e.g., computerized data acquisition and handling, alarm sensor, or manual log entries based on gauge readings), and, if applicable, the period over which discrete data points will be averaged for the purpose of determining whether an excursion or exceedance has occurred.

(I) At a minimum, the owner or operator shall design the period over which data are obtained and, if applicable, averaged consistent with the characteristics and typical variability of the pollutant-specific emissions unit (including the control device and associated capture system). Such intervals shall be commensurate with the time period over which a change in control device performance that would require actions by owner or operator to return operations within normal ranges or designated conditions is likely to be observed.

(II) For all pollutant-specific emissions units with the potential to emit, calculated including the effect of control devices, the applicable regulated air pollutant in an amount equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source, for each parameter monitored, the owner or operator shall collect four or more data values equally spaced over each hour and average the values, as applicable, over the applicable averaging period as determined in accordance with paragraph (c)(ii)(D)(I) of this section. The Division may approve a reduced data collection frequency, if appropriate, based on information presented by the owner or operator concerning the data collection mechanisms available for a particular parameter for the particular pollutant-specific emissions unit (e.g., integrated raw material or fuel analysis data, noninstrumental measurement of waste feed rate or visible emissions, use of a portable analyzer or an alarm sensor).

(III) For other pollutant-specific emissions units, the frequency of data collection may be less than the frequency specified in subparagraph (c)(ii)(D)(II) of this section but the monitoring shall include some data collection at least once per 24-hour period (e.g., a daily inspection of a carbon adsorber operation in conjunction with a weekly or monthly check of emissions with a portable analyzer).

(iii) Evaluation factors. In designing monitoring to meet the requirements in paragraphs (c)(i) and (c)(ii) of this section, the owner or operator shall take into account site-specific factors including the applicability of existing monitoring equipment and procedures, the ability of the monitoring to account for process and control device operational variability, the reliability and latitude built into the control technology, and the level of actual emissions relative to the compliance limitation.

(iv) Special criteria for the use of continuous emission, opacity or predictive monitoring systems.

(A) If a continuous emission monitoring system (CEMS), continuous opacity monitoring system (COMS) or predictive emission monitoring system (PEMS) is required pursuant to other authority under the Act or state or local law, the owner or operator shall use such system to satisfy the requirements of this section.

(B) The use of a CEMS, COMS, or PEMS that satisfies any of the following monitoring requirements shall be deemed to satisfy the general design criteria in paragraphs (c)(i) and (c)(ii) of this section, provided that a COMS may be subject to the criteria for establishing indicator ranges under paragraph (c)(i) of this section:

(I) Section 51.214 and Appendix P of 40 CFR part 51;

(II) Chapter 5, Section 2(j) and Section 2(b)(i), 40 CFR part 60, Appendix B;

(III) Chapter 5, Section 3(j) and any applicable performance specifications required pursuant to the applicable subpart of Chapter 5, Section 3;

(IV) Chapter 11, Section 2b, Acid Rain, Continuous emission monitoring;

(V) 40 CFR part 266, Subpart H and appendix IX; or

(VI) If an applicable requirement does not otherwise require compliance with the requirements listed in the preceding paragraphs (c)(iv)(B)(I)-(V) of this section, comparable requirements and specifications established by the Division.

(C) The owner or operator shall design the monitoring system subject to subsection (c)(iv) to:

(I) Allow for reporting of exceedances (or excursions if applicable to a COMS used to assure compliance with a particulate matter standard), consistent with any period for reporting of exceedances in an underlying requirement. If an underlying requirement does not contain a provision for establishing an averaging period for the reporting of exceedances or excursions, the criteria used to develop an averaging period in (c)(ii)(D) of this section shall apply; and

(II) Provide an indicator range consistent with paragraph (c)(i) of this section for a COMS used to assure compliance with a particulate matter standard. If an opacity standard applies to the pollutant-specific emissions unit, such limit may be used as the appropriate indicator range unless the opacity limit fails to meet the criteria in paragraph (c)(i) of this section after considering the type of control device and other site-specific factors applicable to the pollutant-specific emissions unit.

(d) Submittal requirements.

(i) The owner or operator shall submit to the Division monitoring that satisfies the design requirements in Chapter 7, Section 3(c). The submission shall include the following information:

(A) The indicators to be monitored to satisfy Chapter 7, Section 3(c)(i)(A)-(B);

(B) The ranges or designated conditions for such indicators, or the process by which such indicator ranges or designated conditions shall be established;

(C) The performance criteria for the monitoring to satisfy Chapter 7, Section 3(c)(ii); and

(D) If applicable, the indicator ranges and performance criteria for a CEMS, COMS or PEMS pursuant to Chapter 7, Section 3(c)(iv).

(ii) As part of the information submitted, the owner or operator shall submit a justification for the proposed elements of the monitoring. If the performance specifications proposed to satisfy Chapter 7, Section 3(c)(ii)(B) or (C) include differences from manufacturer recommendations, the owner or operator shall explain the reasons for the differences between the requirements proposed by the owner or operator and the manufacturer's recommendations or requirements. The owner or operator also shall submit any data supporting the justification, and may refer to generally available sources of information used to support the justification (such as generally available air pollution engineering manuals, or EPA publications on appropriate monitoring for various types of control devices or capture systems). To justify the appropriateness of the monitoring elements proposed, the owner or operator may rely in part on existing applicable requirements that establish the monitoring for the applicable pollutant-specific emissions unit or a similar unit. If an owner or operator relies on presumptively acceptable monitoring, no

further justification for the appropriateness of that monitoring should be necessary other than an explanation of the applicability of such monitoring to the unit in question, unless data or information is brought forward to rebut the assumption. Presumptively acceptable monitoring includes:

(A) Presumptively acceptable or required monitoring approaches, established by the Division in a rule that constitutes part of the applicable implementation plan required pursuant to title I of the Act, that are designed to achieve compliance with this section for particular pollutant-specific emissions units;

(B) Continuous emission, opacity or predictive emission monitoring systems that satisfy applicable monitoring requirements and performance specifications as specified in Chapter 7, Section 3(c)(iv);

(C) Excepted or alternative monitoring methods allowed or approved pursuant to Chapter 11, Section 2(b), Acid Rain, Continuous emission monitoring;

(D) Monitoring included for standards exempt from this section pursuant to Chapter 7, Section 3(b)(ii)(A)(I) or (VI) to the extent such monitoring is applicable to the performance of the control device (and associated capture system) for the pollutant-specific emissions unit; and

(E) Presumptively acceptable monitoring identified in guidance by EPA. Such guidance will address the requirements under Chapter 7, Section 3(d)(i),(ii) and (iii) to the extent practicable.

(iii) (A) Except as provided in Chapter 7, Section 3(d)(iv), the owner or operator shall submit control device (and process and capture system, if applicable) operating parameter data obtained during the conduct of the applicable compliance or performance test conducted under conditions specified by the applicable rule. If the applicable rule does not specify testing conditions or only partially specifies test conditions, the performance test generally shall be conducted under conditions representative of maximum emissions potential under anticipated operating conditions at the pollutant-specific emissions unit. Such data may be supplemented, if desired, by engineering assessments and manufacturer's recommendations to justify the indicator ranges (or, if applicable, the procedures for establishing such indicator ranges). Emission testing is not required to be conducted over the entire indicator range or range of potential emissions.

(B) The owner or operator must document that no changes to the pollutant-specific emissions unit, including the control device and capture system, have taken place that could result in a significant change in the control system performance or the selected ranges or designated conditions for the indicators to be monitored since the performance or compliance tests were conducted.

(iv) If existing data from unit-specific compliance or performance testing specified in Chapter 7, Section 3(d)(iii) are not available, the owner or operator:

(A) Shall submit a test plan and schedule for obtaining such data in accordance with Chapter 7, Section 3(d)(v); or

(B) May submit indicator ranges (or procedures for establishing indicator ranges) that rely on engineering assessments and other data, provided that the owner or operator demonstrates that factors specific to the type of monitoring, control device, or pollutant-specific emissions unit make compliance or performance testing unnecessary to establish indicator ranges at levels that satisfy the criteria in Chapter 7, Section 3(c)(i).

(v) If the monitoring submitted by the owner or operator requires installation, testing, or other necessary activities prior to use of the monitoring for purposes of this part, the owner or operator shall include an implementation plan and schedule for installing, testing and performing any other appropriate activities prior to use of the monitoring. The implementation plan and schedule shall provide for use of the monitoring as expeditiously as practicable after approval of the monitoring in the Chapter 6, Section 3 operating permit pursuant to Chapter 7, Section 3(f), but in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval of the permit.

(vi) If a control device is common to more than one pollutant-specific emissions unit, the owner or operator may submit monitoring for the control device and identify the pollutant-specific emissions units affected and any process or associated capture device conditions that must be maintained or monitored in accordance with Chapter 7, Section 3(c)(i) rather than submit separate monitoring for each pollutant-specific emissions unit.

(vii) If a single pollutant-specific emissions unit is controlled by more than one control device similar in design and operation, the owner or operator may submit monitoring that applies to all the control devices and identify the control devices affected and any process or associated capture device conditions that must be maintained or monitored in accordance with Chapter 7, Section 3(c)(i) rather than submit a separate description of monitoring for each control device.

(e) Deadlines for submittals.

(i) Large pollutant-specific emissions units. For all pollutant-specific emissions units with the potential to emit (taking into account control devices to the extent appropriate under the definition of this term in Chapter 7, Section 3(a) the applicable regulated air pollutant in an amount equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source, the owner or operator shall submit the information required under Chapter 7, Section 3(d) at the following times:

(A) On or after April 20, 1998, the owner or operator shall submit information as part of an application for an initial Chapter 6, Section 3 operating permit if, by that date, the application either:

(I) Has not been filed; or

(II) Has not yet been determined to be complete by the Division.

(B) On or after April 20, 1998, the owner or operator shall submit information as part of an application for a significant permit revision under Chapter 6, Section 3, but only with respect to those pollutant-specific emissions units for which the proposed permit revision is applicable.

(C) The owner or operator shall submit any information not submitted under the deadlines set forth in Chapter 7, Section 3(e)(i)(A) and (B) as part of the application for the renewal of a Chapter 6, Section 3 operating permit.

(ii) Other pollutant-specific emissions units. For all other pollutant-specific emissions units subject to this part and not subject to Chapter 7, Section 3(e)(i), the owner or operator shall submit the information required under Chapter 7, Section 3(d) as part of an application for a renewal of a Chapter 6, Section 3 operating permit.

(iii) The effective date for the requirement to submit information under Chapter 7, Section 3(d) shall be as specified pursuant to Chapter 7, Section 3(e)(i)-(iii) and a permit reopening to require the submittal of information under this section shall not be required pursuant to Chapter 6, Section 3(d)(vii)(A)(I), provided, however, that, if a Chapter 6, Section 3 operating permit is reopened for cause by EPA or the Division pursuant to Chapter 6, Section 3(d)(vii)(A)(III) or (IV), the applicable agency may require the submittal of information under this section for those pollutant-specific emissions units that are subject to this part and that are affected by the permit reopening.

(iv) Prior to approval of monitoring that satisfies this part, the owner or operator is subject to the requirements of Chapter 6, Section 3(h)(i)(C)(I)(2.).

(f) Approval of monitoring.

(i) Based on an application that includes the information submitted in accordance with Chapter 7, Section 3(e), the Division shall act to approve the monitoring submitted by the owner or operator by confirming that the monitoring satisfies the requirements in Chapter 7, Section 3(c).

(ii) In approving monitoring under this section, the Division may condition the approval on the owner or operator collecting additional data on the indicators to be

monitored for a pollutant-specific emissions unit, including required compliance or performance testing, to confirm the ability of the monitoring to provide data that are sufficient to satisfy the requirements of this part and to confirm the appropriateness of an indicator range(s) or designated condition(s) proposed to satisfy Chapter 7, Section 3(c)(i)(B) and (C) and consistent with the schedule in Chapter 7, Section 3(d)(v).

(iii) If the Division approves the proposed monitoring, the Division shall establish one or more permit terms or conditions that specify the required monitoring in accordance with Chapter 6, Section 3(h)(i)(c)(I). At a minimum, the permit shall specify:

(A) The approved monitoring approach that includes all of the following:

(I) The indicator(s) to be monitored (such as temperature, pressure drop, emissions, or similar parameter);

(II) The means or device to be used to measure the indicator(s) (such as temperature measurement device, visual observation, or CEMS); and

(III) The performance requirements established to satisfy Chapter 7, Section 3(c)(ii) or (iv), as applicable.

(B) The means by which the owner or operator will define an exceedance or excursion for purposes of responding to and reporting exceedances or excursions under Chapter 7, Section 3(g) and (h). The permit shall specify the level at which an excursion or exceedance will be deemed to occur, including the appropriate averaging period associated with such exceedance or excursion. For defining an excursion from an indicator range or designated condition, the permit may either include the specific value(s) or condition(s) at which an excursion shall occur, or the specific procedures that will be used to establish that value or condition. If the latter, the permit shall specify appropriate notice procedures for the owner or operator to notify the Division upon any establishment or reestablishment of the value.

(C) The obligation to conduct the monitoring and fulfill the other obligations specified in Chapter 7, Section 3(g) through (i).

(D) If appropriate, a minimum data availability requirement for valid data collection for each averaging period, and, if appropriate, a minimum data availability requirement for the averaging periods in a reporting period.

(iv) If the monitoring proposed by the owner or operator requires installation, testing or final verification of operational status, the Chapter 6, Section 3 operating permit shall include an enforceable schedule with appropriate milestones for completing such installation, testing, or final verification consistent with the requirements in Chapter 7, Section 3(d)(v).

(v) If the Division disapproves the proposed monitoring, the following applies:

(A) The draft or final permit shall include, at a minimum, monitoring that satisfies the requirements of Chapter 6, Section 3(h)(i)(C)(I)(2.);

(B) The Division shall include in the draft or final permit a compliance schedule for the source owner to submit monitoring that satisfies Chapter 7, Section 3(c) and (d), but in no case shall the owner or operator submit revised monitoring more than 180 days from the date of issuance of the Chapter 6, Section 3 operating permit; and

(C) If the source owner or operator does not submit the monitoring in accordance with the compliance schedule as required in Chapter 7, Section 3(f)(v)(B) or if the Division disapproves the monitoring submitted, the source owner or operator shall be deemed not in compliance with Chapter 7, Section 3, unless the source owner or operator successfully challenges the disapproval.

(g) Operation of approved monitoring.

(i) Commencement of operation. The owner or operator shall conduct the monitoring required under this part upon issuance of a Chapter 6, Section 3 operating permit that includes such monitoring, or by such later date specified in the permit pursuant to Chapter 7, Section 3(f)(v).

(ii) Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(iii) Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(iv) Response to excursions or exceedances.

(A) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(B) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(v) Documentation of need for improved monitoring. After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the Division and, if necessary, submit a proposed modification to the Chapter 6, Section 3 operating permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(h) Quality improvement plan (QIP) requirements.

(i) Based on the results of a determination made under Chapter 7, Section 3(g)(iv)(B), the Administrator or the Division may require the owner or operator to develop and implement a QIP. Consistent with Chapter 7, Section 3(f)(iii)(C), the Chapter 6, Section 3 operating permit may specify an appropriate threshold, such as an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, for requiring the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-

specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

(ii) Elements of a QIP.

(A) The owner or operator shall maintain a written QIP, if required, and have it available for inspection.

(B) The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:

(I) Improved preventive maintenance practices.

(II) Process operation changes.

(III) Appropriate improvements to control methods.

(IV) Other steps appropriate to correct control performance.

(V) More frequent or improved monitoring (only in conjunction with one or more steps under Chapter 7, Section 3(h)(ii)(B)(I) -(IV)).

(iii) If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Division if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(iv) Following implementation of a QIP, upon any subsequent determination pursuant to Chapter 7, Section 3(g)(iv)(B), the Administrator or the Division may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:

(A) Failed to address the cause of the control device performance problems; or

(B) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(v) Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(i) Reporting and recordkeeping requirements.

(i) General reporting requirements.

(A) On and after the date specified in Chapter 7, Section 3(g)(i) by which the owner or operator must use monitoring that meets the requirements of this part, the owner or operator shall submit monitoring reports to the Division in accordance with Chapter 6, Section 3(h)(i)(C)(III).

(B) A report for monitoring under this part shall include, at a minimum, the information required under Chapter 6, Section 3(h)(i)(C)(III) and the following information, as applicable:

(I) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(II) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(III) A description of the actions taken to implement a QIP during the reporting period as specified in Chapter 7, Section 3(h). Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

(ii) General recordkeeping requirements.

(A) The owner or operator shall comply with the recordkeeping requirements specified in Chapter 6, Section 3(h)(i)(C)(II). The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to Chapter 7, Section 3(h) and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

(B) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

(j) Savings provisions.

(i) Nothing in this part shall:

(A) Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this part shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to Chapter 6, Section 2. The purpose of this part is to require, as part of the issuance of a permit under Chapter 6, Section 3, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.

(B) Restrict or abrogate the authority of the Administrator or the Division to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.

(C) Restrict or abrogate the authority of the Administrator or Division to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

APPENDIX H

40 CFR 266.108 Small Quantity On-Site Burner Exemption
40 CFR 279.11 Used Oil Specifications

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

PART 279 – STANDARDS FOR THE MANAGEMENT OF USED OIL

§ 279.11 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 this part 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 §§ 279.72, 279.73, and 279.74(b), the used oil is no longer subject to this part.

Table 1 – Used Oil Not Exceeding Any Specification Level Is Not Subject to This Part When Burned for Energy Recovery[1]

Constituent/property	Allowable level
Arsenic	5 ppm maximum.
Cadmium	2 ppm maximum.
Chromium	10 ppm maximum.
Lead	100 ppm maximum.
Flash point	100°F minimum.
Total halogens	4,000 ppm maximum.[2]
Note: Applicable standards for the burning of used oil containing PCBs are imposed by 40 CFR 761.20(e).	

[1] The specification does not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste (see §279.10(b)).

[2] Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under §279.10(b)(1). Such used oil is subject to subpart H of part 266 of this chapter rather than this part when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

[57 FR 41612, Sept. 10, 1992, as amended at 58 FR 26425, May 3, 1993]

APPENDIX I

40 CFR 63 Subpart ZZZZ
(Added September 6, 2005)

Subpart ZZZZ—National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What This Subpart Covers

§63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

§63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.

§63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

(a) *Affected source.* An affected source is any existing, new, or reconstructed stationary RICE with a site-rating of more than 500 brake horsepower located at a major source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) *Existing stationary RICE.* A stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002. A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.

(2) *New stationary RICE.* A stationary RICE is new if you commenced construction of the stationary RICE on or after December 19, 2002.

(3) *Reconstructed stationary RICE.* A stationary RICE is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.

(b) *Stationary RICE subject to limited requirements.* (1) An affected source which meets either of the criteria in paragraph (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(d).

(i) The stationary RICE is a new or reconstructed emergency stationary RICE; or

(ii) The stationary RICE is a new or reconstructed limited use stationary RICE.

(2) A new or reconstructed stationary RICE which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of § 63.6645(d) and the requirements of §§ 63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.

(3) A stationary RICE which is an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE, an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE, an existing compression ignition (CI) stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

§ 63.6595 When do I have to comply with this subpart?

(a) *Affected sources.* (1) If you have an existing stationary RICE, you must comply with the applicable emission limitations and operating limitations no later than June 15, 2007.

(2) If you start up your new or reconstructed stationary RICE before August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart no later than August 16, 2004.

(3) If you start up your new or reconstructed stationary RICE after August 16, 2004, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.

(b) *Area sources that become major sources.* If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, the compliance dates in paragraphs (b)(1) and (2) of this section apply to you.

(1) Any stationary RICE for which construction or reconstruction is commenced after the date when your area source becomes a major source of HAP must be in compliance with this subpart upon startup of your affected source.

(2) Any stationary RICE for which construction or reconstruction is commenced before your area source becomes a major source of HAP must be in compliance with this subpart within 3 years after your area source becomes a major source of HAP.

(c) If you own or operate an affected source, you must meet the applicable notification requirements in § 63.6645 and in 40 CFR part 63, subpart A.

Emission and Operating Limitations

§63.6600 What emission limitations and operating limitations must I meet?

(a) If you own or operate an existing, new, or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE located at a major source of HAP emissions, you must comply with the emission limitations in Table 1a of this subpart and the operating limitations in Table 1b of this subpart which apply to you.

(b) If you own or operate a new or reconstructed 2SLB or 4SLB stationary RICE or a new or reconstructed CI stationary RICE located at a major source of HAP emissions, you must comply with the emission limitations in Table 2a of this subpart and the operating limitations in Table 2b of this subpart which apply to you.

(c) If you own or operate: An existing 2SLB stationary RICE, an existing 4SLB stationary RICE, or an existing CI stationary RICE; a stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis; an emergency stationary RICE; or a limited use stationary RICE, you do not need to comply with the emission limitations in Tables 1a and 2a of this subpart or operating limitations in Tables 1b and 2b of this subpart.

General Compliance Requirements

§63.6605 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times, except during periods of startup, shutdown, and malfunction.

(b) If you must comply with emission limitations and operating limitations, you must operate and maintain your stationary RICE, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown, and malfunction.

Testing and Initial Compliance Requirements

§63.6610 By what date must I conduct the initial performance tests or other initial compliance demonstrations?

(a) You must conduct the initial performance test or other initial compliance demonstrations in Table 4 of this subpart that apply to you within 180 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions in §63.7(a)(2).

(b) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you must demonstrate initial compliance with either the proposed emission limitations or the promulgated emission limitations no later than February 10, 2005 or no later than 180 days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(c) If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, and you chose to comply with the proposed emission limitations when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limitations by December 13, 2007 or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) An owner or operator is not required to conduct an initial performance test on units for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (d)(1) through (5) of this section.

(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

(2) The test must not be older than 2 years.

(3) The test must be reviewed and accepted by the Administrator.

(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(5) The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

§63.6615 When must I conduct subsequent performance tests?

If you must comply with the emission limitations and operating limitations, you must conduct subsequent performance tests as specified in Table 3 of this subpart.

§63.6620 What performance tests and other procedures must I use?

(a) You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.

(b) Each performance test must be conducted according to the requirements in §63.7(e)(1) and under the specific conditions that this subpart specifies in Table 4. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.

(c) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(d) You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(e)(1) You must use Equation 1 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \quad \text{(Eq. 1)}$$

Where:

C_i = concentration of CO or formaldehyde at the control device inlet,

C_o = concentration of CO or formaldehyde at the control device outlet, and

R = percent reduction of CO or formaldehyde emissions.

(2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO_2). If pollutant concentrations are to be corrected to 15 percent oxygen and CO_2 concentration is measured in lieu of oxygen concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.

(i) Calculate the fuel-specific Fo value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:

$$F_o = \frac{0.209\ F_d}{F_c} \quad \text{(Eq. 2)}$$

Where:

Fo = Fuel factor based on the ratio of oxygen volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is oxygen, percent/100.

Fd = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).

Fc = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, dsm^3/J ($dscf/10^6$ Btu).

(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent oxygen, as follows:

$$X_{CO2} = \frac{5.9}{F_o} \quad \text{(Eq. 3)}$$

Where:

X_{CO2} = CO_2 correction factor, percent.

5.9 = 20.9 percent O_2-15 percent O_2, the defined O_2 correction value, percent.

(iii) Calculate the NO_X and SO_2 gas concentrations adjusted to 15 percent O_2 using CO_2 as follows:

$$C_{adj} = C_d \frac{X_{CO2}}{\%CO_2} \quad \text{(Eq. 4)}$$

Where:

$\%CO_2$ = Measured CO_2 concentration measured, dry basis, percent.

(f) If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.

(g) If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.

(1) Identification of the specific parameters you propose to use as operating limitations;

(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;

(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;

(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

(h) If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.

(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (*e.g.*, operator adjustment, automatic controller adjustment, *etc.*) or unintentionally (*e.g.*, wear and tear, error, *etc.*) on a routine basis or over time;

(2) A discussion of the relationship, if any, between changes in the parameters and

changes in HAP emissions;

(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;

(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;

(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;

(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and

(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.

(i) The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.

§63.6625 What are my monitoring, installation, operation, and maintenance requirements?

(a) If you elect to install a CEMS as specified in Table 5 of this subpart, you must install, operate, and maintain a CEMS to monitor CO and either oxygen or CO_2 at both the inlet and the outlet of the control device according to the requirements in paragraphs (a)(1) through (4) of this section.

(1) Each CEMS must be installed, operated, and maintained according to the applicable performance specifications of 40 CFR part 60, appendix B.

(2) You must conduct an initial performance evaluation and an annual relative accuracy test audit (RATA) of each CEMS according to the requirements in §63.8 and according to the applicable performance specifications of 40 CFR part 60, appendix B as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.

(3) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. You must have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.

(4) The CEMS data must be reduced as specified in § 63.8(g)(2) and recorded in parts per million or parts per billion (as appropriate for the applicable limitation) at 15 percent oxygen or the equivalent CO_2 concentration.

(b) If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of this subpart, you must install, operate, and maintain each CPMS according to the requirements in §63.8.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must monitor and record your fuel usage daily with separate fuel meters to measure the volumetric flow rate of each fuel. In addition, you must operate your stationary RICE in a manner which reasonably minimizes HAP emissions.

§63.6630 How do I demonstrate initial compliance with the emission limitations and operating limitations?

(a) You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart.

(b) During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.

(c) You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.

Continuous Compliance Requirements

§63.6635 How do I monitor and collect data to demonstrate continuous compliance?

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.

(b) Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously at all times that the stationary RICE is operating.

(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

§63.6640 How do I demonstrate continuous compliance with the emission limitations and operating limitations?

(a) You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b and Tables 2a and 2b of this subpart that apply to you according to methods specified in Table 6 of this subpart.

(b) You must report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b and Tables 2a and 2b of this subpart that apply to you. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE.

(c) During periods of startup, shutdown, and malfunction, you must operate in accordance with your startup, shutdown, and malfunction plan.

(d) Consistent with §§63.6(e) and 63.7(e)(1), deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the startup, shutdown, and malfunction plan. For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations.

Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR §94.11(a).

(e) You must also report each instance in which you did not meet the requirements in Table 8 of this subpart that apply to you. If you own or operate an existing 2SLB stationary RICE, an existing 4SLB stationary RICE, an existing CI stationary RICE, an existing emergency stationary RICE, an existing limited use emergency stationary RICE, or an existing stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you do not need to comply with the requirements in Table 8 of this subpart. If you own or operate a new or reconstructed stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new or reconstructed emergency stationary RICE, or a new or

reconstructed limited use stationary RICE, you do not need to comply with the requirements in Table 8 of this subpart, except for the initial notification requirements.

Notifications, Reports, and Records

§63.6645 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you start up your stationary RICE before the effective date of this subpart, you must submit an Initial Notification not later than December 13, 2004.

(c) If you start up your new or reconstructed stationary RICE on or after August 16, 2004, you must submit an Initial Notification not later than 120 days after you become subject to this subpart.

(d) If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in § 63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE).

(e) If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).

(f) If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

(1) For each initial compliance demonstration required in Table 5 of this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.

(2) For each initial compliance demonstration required in Table 5 of this subpart that includes a performance test conducted according to the requirements in Table 4 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).

§63.6650 What reports must I submit and when?

(a) You must submit each report in Table 7 of this subpart that applies to you.

(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) The first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.

(2) The first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.

(3) Each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.

(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation that occurs for a stationary RICE where you are not using a CMS to comply with the emission or operating limitations in this subpart, the Compliance report must contain the information in paragraphs (c)(1) through (4) of this section and the information in paragraphs (d)(1) and (2) of this section.

(1) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an emission or operating limitation occurring for a stationary RICE where you are using a CMS to comply with the emission and operating limitations in this subpart, you must include information in paragraphs (c)(1) through (4) and (e)(1) through (12) of this section.

(1) The date and time that each malfunction started and stopped.

(2) The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out-of-control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period.

(8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.

(9) A brief description of the stationary RICE.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting

period.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Table 7 of this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6 (a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in this subpart, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you are operating as a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must submit an annual report according to Table 7 of this subpart by the date specified unless the Administrator has approved a different schedule, according to the information described in paragraphs (b)(1) through (b)(5) of this section. You must report the data specified in (g)(1) through (g)(3) of this section.

(1) Fuel flow rate of each fuel and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by landfill gas or digester gas is equivalent to 10 percent or more of the total fuel consumption on an annual basis.

(2) The operating limits provided in your federally enforceable permit, and any deviations from these limits.

(3) Any problems or errors suspected with the meters.

§63.6655 What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(3), (b)(1) through (b)(3) and (c) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

(b) For each CEMS or CPMS, you must keep the records listed in paragraphs (b)(1) through (3) of this section.

(1) Records described in § 63.10(b)(2)(vi) through (xi).

(2) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in §63.8(f)(6)(i), if applicable.

(c) If you are operating a new or reconstructed stationary RICE which fires landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, you must keep the records of your daily fuel usage monitors.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

§63.6660 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record readily accessible in hard copy or electronic form on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1). You can keep the records off-site for the remaining 3 years.

Other Requirements and Information

§63.6665 What parts of the General Provisions apply to me?

Table 8 of this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you. If you own or operate an existing 2SLB, an existing 4SLB stationary RICE, an existing CI stationary RICE, an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an existing emergency stationary RICE, or an existing limited use stationary RICE, you do not need to comply with any of the requirements of the General Provisions. If you own or operate a new stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, a new emergency stationary RICE, or a new limited use stationary RICE, you do not need to comply with the requirements in the General Provisions except for the initial notification requirements.

§63.6670 Who implements and enforces this subpart?

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

(1) Approval of alternatives to the non-opacity emission limitations and operating limitations in §63.6600 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

(5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in §63.6610(b).

§63.6675 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

CAA means the Clean Air Act (42 U.S.C. 7401 *et seq.*, as amended by Public Law 101–549, 104 Stat. 2399).

Compression ignition engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition, including diesel engines, dual-fuel engines, and engines that are not spark ignition.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing

operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless or whether or not such failure is permitted by this subpart.

(4) Fails to conform to any provision of the applicable startup, shutdown, or malfunction plan, or to satisfy the general duty to minimize emissions established by §63.6(c)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO_2.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary RICE that operates in an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc. Emergency stationary RICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit on the use of emergency stationary RICE in emergency situations and for routine testing and maintenance. Emergency stationary RICE may also operate an additional 50 hours per year in non-emergency situations.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the natural gas and becomes "rich" glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The "lean" glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO_2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/ naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in §63.2, except that:

(1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;

(2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated;

(3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and

(4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in §63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. May be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NO_X) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NO_X, CO, and volatile organic compounds (VOC) into CO_2, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (*i.e.*, remove impurities or other constituents to meet contract specifications), or stored prior to the point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank

batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a 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 or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in §63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to §63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to §63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C_3H_8.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NO_X (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition engine means a type of engine in which a compressed air/fuel mixture is ignited by a timed electric spark generated by a spark plug.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart PPPPP of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

Tables to Subpart ZZZZ of Part 63

As stated in §§63.6600 and 63.6640, you must comply with the following emission limitations for existing, new and reconstructed 4SRB stationary RICE at 100 percent load plus or minus 10 percent:

TABLE 1a TO SUBPART ZZZZ OF PART 63 — EMISSION LIMITATIONS FOR EXISTING, NEW, AND RECONSTRUCTED SPARK IGNITION, 4SRB STATIONARY RICE

For each . . .	You must meet *one* of the following emission limitations . . .
1. 4SRB RICE	a. Reduce formaldehyde emissions by 76 percent or more. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may reduce formaldehyde emissions by 75 percent or more until June 15, 2007, or b. Limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2.

As stated in §§63.6600, 63.6630 and 63.6640, you must comply with the following operating emission limitations for existing, new and reconstructed 4SRB stationary RICE:

TABLE 1B TO SUBPART ZZZZ OF PART 63 — OPERATING LIMITATIONS FOR EXISTING, NEW, AND RECONSTRUCTED SPARK IGNITION, 4SRB STATIONARY RICE

For each . . .	You must meet the following emission limitation . . .
1. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 percent or more (or by 75 percent or more, if applicable) and using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2 and using NSCR.	a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than two inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst measured during the initial performance test; and b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 750°F and less than or equal to 1250°F.
2. 4SRB stationary RICE complying with the requirement to reduce formaldehyde emissions by 76 pereent or more (or by 75 percent if applicable) and not using NSCR; or 4SRB stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust to 350 ppbvd or less at 15 percent O_2 and not using NSCR.	Comply with any operating limitations approved by the Administrator.

As stated in §§ 63.6600 and 63.6640, you must comply with the following emission limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE at 100 percent load plus or minus 10 percent:

TABLE 2a TO SUBPART ZZZZ OF PART 63 — EMISSION LIMITATIONS FOR NEW AND RECONSTRUCTED LEAN BURN AND COMPRESSION IGNITION STATIONARY RICE

For each . . .	You must meet the following emission limitation . . .
1. 2SLB stationary RICE ...	a. Reduce CO emissions by 58 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 12 ppmvd or less at 15 percent O_2. If you commenced construction or reconstruction between December 19, 2002 and June 15, 2004, you may limit concentration of formaldehyde to 17 ppmvd or less at 15 percent O_2 until June 15, 2007.
2. 4SLB stationary RICE ...	a. Reduce CO emissions by 93 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O_2.
3. CI stationary RICE	a. Reduce CO emissions by 70 percent or more; or b. Limit concentration of formaldehyde in the stationary RICE exhaust to 580 ppbvd or less at 15 percent O_2.

As stated in §§ 63.6600, 63.6630, and 63.6640, you must comply with the following operating limitations for new and reconstructed lean burn and new and reconstructed compression ignition stationary RICE:

TABLE 2b TO SUBPART ZZZZ OF PART 63 — OPERATING LIMITATIONS FOR NEW AND RECONSTRUCTED LEAN BURN AND COMPRESSION IGNITION STATIONARY RICE

For each . . .	You must meet the following operating limitation . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and using an oxidation catalyst.	a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than two inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; and b. Maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F.
2. 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to reduce CO emissions and not using an oxidation catalyst; or 2SLB and 4SLB stationary RICE and CI stationary RICE complying with the requirement to limit the concentration of formaldehyde in the stationary RICE exhaust and not using an oxidation catalyst.	Comply with any operating limitations approved by the Administrator.

As stated in §§ 63.6615 and 63.6620, you must comply with the following subsequent performance test requirements:

TABLE 3 TO SUBPART ZZZZ OF PART 63 — SUBSEQUENT PERFORMANCE TESTS

For each . . .	Complying with the requirement to . . .	You must . . .
1. 2SLB and 4SLB stationary RICE and C1 stationary RICE.	Reduce CO emissions and not using a CEMS	Conduct subsequent performance tests semi-annually.[1]
2. 4SRB stationary RICE with a brake horsepower ≥ 5,000.	Reduce formaldehyde emissions	Conduct subsequent performance tests semi-annually.[1]
3. Stationary RICE (all stationary RICE subcategories and all brake horsepower ratings).	Limit the concentration of formaldehyde in the stationary RICE exhaust.	Conduct subsequent performance tests semi-annually.[1]

[1] After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

As stated in §§ 63.6610, 63.6620, and 63.6640, you must comply with the following requirements for performance tests:

TABLE 4 TO SUBPART ZZZZ OF PART 63 — REQUIREMENTS FOR PERFORMANCE TESTS

For each . . .	Complying with the requirement to	You must . . .	Using . . .	According to the following requirements
1. 2SLB and 4SLB stationary RICE and CI stationary RICE.	a. Reduce CO emissions	i. Measure the O_2 at the inlet and outlet of the control device; and	(1) Portable CO and O_2 analyzer.	(a) Using ASTM D6522-00 [1] (incorporated by reference, see §63.14). Measurements to determine O_2 must be made at the same time as the measurements for CO concentration.
		ii. Measure the CO at the inlet and the outlet of the control device.	(1) Portable CO and O_2 analyzer.	(a) Using ASTM D6522-00 [1] (incorporated by reference, see § 63.14). The CO concentration must be at 15 percent O_2, dry basis.
2. 4SRB stationary RICE	a. Reduce formaldehyde emissions.	i. Select sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60 appendix A § 63.7(d)(1)(i).	(a) Sampling sites must be located at the inlet and outlet of the control device.
		ii. Measure O_2 at the inlet and outlet of the control device; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A.	(a) Measurements to determine O_2 concentration must be made at the same time as the measurements for formaldehyde concentration.
		(iii) Measure moisture content at the inlet and outlet of the control device; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03.	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		(iv) Measure formaldehyde at the inlet and the outlet of the control device	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03 [2], provided in ASTM D6348–03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130.	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
3. Stationary RICE	a. Limit the concentration of formaldehyde in the stationary RICE exhaust.	(i) Select the sampling port location and the number of traverse points; and	(1) Method 1 or 1A of 40 CFR part 60, appendix A §63.7(d)(1)(i).	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		(ii) Determine the O_2 concentration of the stationary RICE exhaust at the sampling port location; and	(1) Method 3 or 3A or 3B of 40 CFR part 60, appendix A.	(a) Measurements to determine O_2 concentration must be made at the same time and location as the measurements for formaldehyde concentration.
		(iii) Measure moisture content of the stationary RICE exhaust at the sampling port location; and	(1) Method 4 of 40 CFR part 60, appendix A, or Test Method 320 of 40 CFR part 63, appendix A, or ASTM D 6348–03.	(a) Measurements to determine moisture content must be made at the same time and location as the measurements for formaldehyde concentration.
		(iv) Measure formaldehyde at the exhaust of the stationary RICE	(1) Method 320 or 323 of 40 CFR part 63, appendix A; or ASTM D6348-03 [2], provided in ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be greater than or equal to 70 and less than or equal to 130.	(a) Formaldehyde concentration must be at 15 percent O_2, dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

[1] You may also use Methods 3A and 10 as options to ASTM–D6522–00. You may obtain a copy of ASTM–D6522–00 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

[2] You may obtain a copy of ASTM–D6348–03 from at least one of the following addresses: American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959, or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.

As stated in §§63.6625 and 63.6630, you must initially comply with the emission and operating limitations as required by the following:

TABLE 5 TO SUBPART ZZZZ OF PART 63 — INITIAL COMPLIANCE WITH EMISSION LIMITATIONS AND OPERATING LIMITATIONS

For each . . .	Complying with the requirement to . . .	You have demonstrated initial compliance if
1. 2SLB and 4SLB stationary RICE and CI stationary RICE.	a. Reduce CO emissions and using oxidation catalyst, and using a CPMS.	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
2. 2SLB and 4SLB stationary RICE and CI stationary RICE.	a. Reduce CO emissions and not using oxidation catalyst.	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
3. 2SLB and 4SLB stationary RICE and CI stationary RICE.	a. Reduce CO emissions, and using a CEMS	i. You have installed a CEMS to continuously monitor CO and either O_2 or CO_2 at both the inlet and outlet of the oxidation catalyst according to the requirements in §63.6625(a); and ii. You have conducted a performance evaluation of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B; and iii. The average reduction of CO calculated using §63.6620 equals or exceeds the required percent reduction. The initial test comprises the first 4-hour period after successful validation of the CEMS. Compliance is based on the average percent reduction achieved during the 4-hour period.
4. 4SRB stationary RICE	a. Reduce formaldehyde emissions and using NSCR.	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
5. 4SRB stationary RICE	a. Reduce formaldehyde emissions and not using NSCR.	i. The average reduction of emissions of formaldehyde determined from the initial performance test is equal to or greater than the required formaldehyde percent reduction; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.
6. Stationary RICE	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR.	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in §63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.
7. Stationary RICE	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR.	i. The average formaldehyde concentration, corrected to 15 percent O_2, dry basis, from the three test runs is less than or equal to the formaldehyde emission limitation; and ii. You have installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in §63.6625(b); and iii. You have recorded the approved operating parameters (if any) during the initial performance test.

As stated in § 63.6640, you must continuously comply with the emissions and operating limitations as required by the following:

TABLE 6 TO SUBPART ZZZZ OF PART 63 — CONTINUOUS COMPLIANCE WITH EMISSION LIMITATIONS AND OPERATING LIMITATIONS

For each . . .	Complying with the requirement to . . .	You must demonstrate continuous compliance by . . .
1. 2SLB and 4SLB stationary RICE and CI stationary RICE.	a. Reduce CO emissions and using an oxidation catalyst, and using a CPMS.	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved [1]; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
2. 2SLB and 4SLB stationary RICE and CI stationary RICE	a. Reduce CO emissions and not using an oxidation catalyst, and using a CPMS.	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved [1]; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
3. 2SLB and 4SLB stationary RICE and CI stationary RICE.	a. Reduce CO emissions and using a CEMS	i. Collecting the monitoring data according to §63.6625(a), reducing the measurements to 1-hour averages, calculating the percent reduction of CO emissions according to §63.6620; and ii. Demonstrating that the catalyst achieves the required percent reduction of CO emissions over the 4-hour averaging period; and iii. Conducting an annual RATA of your CEMS using PS 3 and 4A of 40 CFR part 60, appendix B, as well as daily and periodic data quality checks in accordance with 40 CFR part 60, appendix F, procedure 1.
4. 4SRB stationary RICE	a. Reduce formaldehyde emissions and using NSCR.	i. Collecting the catalyst inlet temperature data according to § 63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and iii. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and iv Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
5. 4SRB stationary RICE	a. Reduce formaldehyde emissions and not using NSCR.	i. Collecting the approved operating parameter (if any) data according to §63.6625(b); and ii. Reducing these data to 4-hour rolling averages; iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.
6. 4SRB stationary RICE with a brake horsepower ≥ 5,000.	a. Reduce formaldehyde emissions	Conducting semiannual performance tests for formaldehyde to demonstrate that the required formaldehyde percent reduction is achieved [1].
7. Stationary RICE	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and using oxidation catalyst or NSCR.	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit [1]; and ii. Collecting the catalyst inlet temperature data according to §63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
8. Stationary RICE	a. Limit the concentration of formaldehyde in the stationary RICE exhaust and not using oxidation catalyst or NSCR.	i. Conducting semiannual performance tests for formaldehyde to demonstrate that your emissions remain at or below the formaldehyde concentration limit [1]; and ii. Collecting the approved operating parameter (if any) data according to §63.6625(b); and ii. Reducing these data to 4-hour rolling averages; and iii. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

[1] After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

As stated in § 63.6650, you must comply with the following requirements for reports:

TABLE 7 TO SUBPART ZZZZ OF PART 63 — REQUIREMENTS FOR REPORTS

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Compliance report.....	a. If there are no deviations from any emission limitations or operating limitations that apply to you, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were not periods during which the CMS was out-of control during the reporting period; or	i. Semiannually according to the requirements in §63.6650(b).
	b. If you had a deviation from any emission limitation or operating limitation during the reporting period, the information in §63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), the information in §63.6650(e); or	i. Semiannually according to the requirements §63. in 6650(b).
	c. If you had a startup, shutdown or malfunction during the reporting period, the information in §63.10(d)(5)(i).	i. Semiannually according to the requirements in §63.6650(b).
2. An immediate startup, shutdown, and malfunction report if actions addressing the startup, shutdown, or malfunction were inconsistent with your startup, shutdown, or malfunction plan during the reporting period.	a. Actions taken for the event; and	i. By fax or telephone within 2 working days after starting actions inconsistent with the plan.
	b. The information in §63.10(d)(5)(ii).	i. By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authorities. (§63.10(d)(5)(ii))
3. Report	a. The fuel flow rate of each fuel and the heating values that were used in your calculations, and you must demonstrate that the percentage of heat input provided by landfill gas or digester gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and	i. Annually, according to the requirements in §63.6650
	b. The operating limits provided in your federally enforceable permit, and any deviations from these limits; and	i. See item 3.a.i.
	c. Any problems or errors suspected with the meters.	i. See item 3.a.i.

As stated in § 63.6665, you must comply with the following applicable general provisions:

TABLE 8 TO SUBPART ZZZZ OF PART 63 — APPLICABILITY OF GENERAL PROVISIONS TO SUBPART ZZZ

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.1	General applicability of the General Provisions	Yes.	
§ 63.2	Definitions	Yes.	Additional terms defined in §63.6675.
§ 63.3	Units and abbreviations	Yes.	
§ 63.4	Prohibited activities and circumvention.....	Yes.	
§ 63.5	Construction and reconstruction	Yes.	
§ 63.6(a)	Applicability	Yes.	
§ 63.6(b)(1)–(4)	Compliance dates for new and reconstructed sources	Yes.	
§ 63.6(b)(5)	Notification	Yes.	
§ 63.6(b)(6)	[Reserved].	.	
§ 63.6(b)(7).....	Compliance dates for new and reconstructed area sources that become major sources	Yes.	
§ 63.6(c)(1)–(2)	Compliance dates for existing sources.....	Yes.	
§ 63.6(c)(3)–(4)	[Reserved].	.	
§ 63.6(c)(5)	Compliance dates for existing area sources that become major sources.	Yes.	
§ 63.6(d)	[Reserved].	.	
§ 63.6(e)(1).....	Operation and maintenance	Yes.	
§ 63.6(e)(2)	[Reserved].	.	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.6(e)(3)	Startup, shutdown, and malfunction plan	Yes.	
§ 63.6(f)(1)	Applicability of standards except during startup shutdown malfunction (SSM).	Yes.	
§ 63.6(f)(2)	Methods for determining compliance	Yes.	
§ 63.6(f)(3)	Finding of compliance	Yes.	
§ 63.6(g)(1)–(3)	Use of alternate standard	Yes.	
§ 63.6(h)	Opacity and visible emission standards	No	Subpart ZZZZ does not contain opacity or visible emission standards.
§ 63.6(i)	Compliance extension procedures and criteria.	Yes.	
§ 63.6(j)	Presidential compliance exemption	Yes	
§ 63.7(a)(1)–(2)	Performance test dates	Yes	Subpart ZZZZ contains performance test dates at §63.6610.
§ 63.7(a)(3)	CAA section 114 authority	Yes	
§ 63.7(b)(1)	Notification of performance test	Yes	
§ 63.7(b)(2)	Notification of rescheduling	Yes	
§ 63.7(c)	Quality assurance/test plan	Yes	
§ 63.7(d)	Testing facilities	Yes	
§ 63.7(e)(1)	Conditions for conducting performance tests.	Yes	
§ 63.7(e)(2)	Conduct of performance tests and reduction of data.	Yes	Subpart ZZZZ specifies test methods at §63.6620.
§ 63.7(e)(3)	Test run duration	Yes	
§ 63.7(e)(4)	Administrator may require other testing under section 114 of the CAA.	Yes	
§ 63.7(f)	Alternative test method provisions	Yes	
§ 63.7(g)	Performance test data analysis, recordkeeping, and reporting.	Yes	
§ 63.7(h)	Waiver of tests	Yes	
§ 63.8(a)(1)	Applicability of monitoring requirements	Yes	Subpart ZZZZ contains specific requirements for monitoring at §63.6625.
§ 63.8(a)(2)	Performance specifications	Yes	
§ 63.8(a)(3)	[Reserved]		
§ 63.8(a)(4)	Monitoring for control devices	No	
§ 63.8(b)(1)	Monitoring	Yes	
§ 63.8(b)(2)–(3)	Multiple effluents and multiple monitoring systems.	Yes	
§ 63.8(c)(1)	Monitoring system operation and maintenance.	Yes	
§ 63.8(c)(1)(i)	Routine and predictable SSM	Yes	
§ 63.8(c)(1)(ii)	SSM not in Startup Shutdown Malfunction Plan.	Yes	
§ 63.8(c)(1)(iii)	Compliance with operation and maintenance requirements.	Yes	
§ 63.8(c)(2)–(3)	Monitoring system installation	Yes	
§ 63.8(c)(4)	Continuous monitoring system (CMS) requirements.	Yes	Except that subpart ZZZZ does not require Continuous Opacity Monitoring System (COMS).
§ 63.8(c)(5)	COMS minimum procedures	No	Subpart ZZZZ does not require COMS.
§ 63.8(c)(6)–(8)	CMS requirements	Yes	Except that subpart ZZZZ does not require COMS.
§ 63.8(d)	CMS quality control	Yes	
§ 63.8(e)	CMS performance evaluation	Yes	Except for §63.8(e)(5)(ii), which applies to COMS.
§ 63.8(f)(1)–(5)	Alternative monitoring method	Yes	
§ 63.8(f)(6)	Alternative to relative accuracy test	Yes	
§ 63.8(g)	Data reduction	Yes	Except that provisions for COMS are not applicable. Averaging periods for demonstrating compliance are specified at §§ 63.6635 and 63.6640
§ 63.9(a)	Applicability and State delegation of notification requirements.	Yes	

General provisions citation	Subject of citation	Applies to subpart	Explanation
§ 63.9(b)(1)–(5)	Initial notifications	Yes	Except that §63.9(b)(3) is reserved.
§ 63.9(c)	Request for compliance extension	Yes	
§ 63.9(d)	Notification of special compliance requirements for new sources.	Yes	
§ 63.9(e)	Notification of performance test	Yes	
§ 63.9(f)	Notification of visible emission (VE)/opacity test.	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(1)	Notification of performance evaluation	Yes	
§ 63.9(g)(2)	Notification of use of COMS data	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.9(g)(3)	Notification that criterion for alternative to RATA is exceeded.	Yes	If alternative is in use.
§ 63.9(h)(1)–(6)	Notification of compliance status	Yes	Except that notifications for sources using a CEMS are due 30 days after completion of performance evaluations. §63.9(h)(4) is reserved.
§ 63.9(i)	Adjustment of submittal deadlines	Yes	
§ 63.9(j)	Change in previous information	Yes	
§ 63.10(a)	Administrative provisions for record keeping/reporting.	Yes.	
§ 63.10(b)(1)	Record retention	Yes.	
§ 63.10(b)(2)(i)–(v)	Records related to SSM	Yes.	
§ 63.10(b)(2)(vi)–(xi)	Records	Yes.	
§ 63.10(b)(2)(xii)	Record when under waiver	Yes.	
§ 63.10(b)(2)(xiii)	Records when using alternative to RATA	Yes	For CO standard if using RATA alternative
§ 63.10(b)(2)(xiv)	Records of supporting documentation	Yes.	
§ 63.10(b)(3)	Records of applicability determination	Yes.	
§ 63.10(c)	Additional records for sources using CEMS.	Yes	Except that §63.10(c)(2)–(4) and (9) are reserved.
§ 63.10(d)(1)	General reporting requirements	Yes.	
§ 63.10(d)(2)	Report of performance test results	Yes.	
§ 63.10(d)(3)	Reporting opacity or VE observations	No	Subpart ZZZZ does not contain opacity or VE standards.
§ 63.10(d)(4)	Progress reports	Yes.	
§ 63.10(d)(5)	Startup, shutdown, and malfunction reports	Yes.	
§ 63.10(e)(1) and (2)(i)	Additional CMS reports	Yes.	
§ 63.10(e)(2)(ii)	COMS-related report	No	Subpart ZZZZ does not require COMS.
§ 63.10(e)(3)	Excess emission and parameter exceedances reports.	Yes	Except that §63.10(e)(3)(i)(C) is reserved.
§ 63.10(e)(4)	Reporting COMS data	No	Subpart ZZZZ does not require COMS.
§ 63.10(f)	Waiver for recordkeeping/reporting	Yes.	
§ 63.11	Flares	No.	
§ 63.12	State authority and delegations	Yes.	
§ 63.13	Addresses	Yes.	
§ 63.14	Incorporation by reference	Yes.	
§ 63.15	Availability of information	Yes.	

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