

Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

John Corra, Director

November 29, 2005

Mr. Jon Tolman PacifiCorp P.O. Box 191 Kemmerer, WY 83101

> Re: Naughton Plant Chapter 6, Section 3 Operating Permit 3-1-121-1

CERTIFIED MAIL

Dear Mr. Tolman:

Enclosed with this letter, please find the modified Operating Permit 3-1-121-1 which the Air Quality Division of the Wyoming Department of Environmental Quality is issuing to the PacifiCorp for the Naughton Plant. Any appeal of the permit as a final action of the Department must be made to the Environmental Quality Council within sixty (60) days of issuance as referenced in Section 16, Chapter 1, General Rules of Practice and Procedure, Department of Environmental Quality.

This modification does not change the expiration date of January 1, 2008. To renew this permit, the PacifiCorp will need to submit an operating permit application at least six (6) months, but no earlier than eighteen (18) months, prior to the date of expiration.

It must be noted that the issuance of this operating permit does not relieve you of your obligation to comply with all applicable county, state, and federal standards, regulations, or ordinances.

If we may be of further assistance to you, please feel free to contact this office.

Sincerely,

Dan Olson Administrator

Air Quality Division

Enclosures



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. 3-1-121-1

Issue Date: November 29, 2005 Expiration Date: January 1, 2008 Effective Date: November 29, 2005

Replaces Permit No.: 31-121

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 Naughton Plant Sections 32 and 33, T21N-R116W Lincoln 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

hn V. Corra. Director

Department of Environmental Quality

Date

WAQSR CHAPTER 6, SECTION 3 OPERATING PERMIT

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

TABLE OF CONTENTS (Modified November 29, 2005)

General Info	rmation	
	sion Points	
	y Estimated Emissions	
Facility-Spec Facil Sour Testi Mon Reco Repo	cific Permit Conditions lity-Wide Permit Conditions ce-Specific Permit Conditions ing Requirements itoring Requirements ordkeeping Requirements orting Requirements orting Requirements	
WAQSR Cha WAQSR Cha	apter 5, Section 2 and 40 CFR 60 Subpart Y Requirements	1
Com	Certification and Schedule	1
State Only Pe Acid Rain Pe Summary of Abbreviation	nit Conditions ermit Conditions ermit Conditions Source Emission Limits and Requirements	2 3
Definitions		3
Appendix B:	Operation & Maintenance Plan for Material Handling Dust Collectors, Material I Dust Suppression Systems, and Diesel Engines WAQSR Chapter 7, Section 2 - Continuous Monitoring Requirements for Existing	_
	40 CFR 60 Subpart Y Phase II Permit Application, Phase II NO _X Compliance Plan, and Phase II NO _X A Plan	Averaging
Appendix F: Appendix G:	FGD Pond Operations and Monitoring Plan (October 2003 revision) Compliance Assurance Monitoring (CAM) Plan (Amended November 4, 2004) WAQSR Chapter 7, Section 3 Compliance Assurance Monitoring (CAM) April 1, 2002 Temporary Exemption from EPA; March 31, 2003 Notification of Guidance; July 3, 2003 PacifiCorp Exemption Renewal Request; January 23, PacifiCorp Supplemental Data; February 19, 2004 EPA Exemption Approve	, 2004
Appendix I:	(Amended August 12, 2005) Fugitive Dust Compliance Plan (Amended August 9, 2004)	

GENERAL INFORMATION

Company Name: PacifiCorp

Mailing Address: 1407 West North Temple

City: Salt Lake City

State: UT

Zip: 84140

Plant Name: Naughton Plant

Plant Location: Section 32 and Section 33, Township 21 North, Range 116 West Lincoln County, Wyoming (Approximately 6 miles southwest of Kemmerer, Wyoming)

Plant Mailing Address: P. O. Box 191

City: Kemmerer

State: WY

Zip: 83101

Name of Owner: PacifiCorp

Phone: (801) 220-2000

Designated Representative: Barry Cunningham

Phone: (801) 220-4589

Responsible Official: Peter Steinbrenner

Phone: (307) 828-4211

Plant Environmental Contact: Angeline Skinner

Phone: (307) 828-4281

(Amended November 29, 2005)

DEQ Air Quality Contact:

District 4 Engineer

Phone: (307) 332-6755

250 Lincoln Street

Lander, Wyoming 82520

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 November 29, 2005)

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

SOURCE ID#	SOURCE DESCRIPTION	SIZE	CH. 6, SEC. 2 PERMITS
1	Electric Utility Steam Generating Unit (NADB #1) (ESP and cyclone controlled)	1,849 MMBtu/hr	MD-403
2	Electric Utility Steam Generating Unit (NADB #2) (ESP and cyclone controlled)	2,370 MMBtu/hr	MD-403
3	Electric Utility Steam Generating Unit (NADB #3) (ESP)	3,679 MMBtu/hr	MD-403
4	Coal Stockpile Reclaim Tunnel (Baghouse)	600 TPH	MD-867
5	Unit #2 Coal Bunker Exhauster & Conveyor Gallery Area (Baghouse)	400 TPH	MD-867
6	Unit #3 Coal Bunker Exhauster & Conveyor Gallery Area (Baghouse)	600 TPH	MD-867
7	Unit #1 Coal Bunker Exhauster (Baghouse)	400 TPH	MD-867
8	Fly Ash Loadout Silo (Baghouse)	25 TPH	OP-122
10	Unit #1 Cooling Tower	56,500 gpm	None
11	Unit #2 Cooling Tower	76,100 gpm	None
12	Unit #3 Cooling Tower	99,000 gpm	None
13	Coal Pile Stacker (Drop Operation)	900 TPH	None
14	Coal Pile Maintenance and Wind Erosion	≈12 acres	None
15	Scrubber Pond SO ₂ Emissions	≈80 acres	Permit Waiver: April 9, 1998
16	Fly Ash Truck Loading (Fugitives)	12,853 TPY ash loaded	OP-122
17	Fly Ash Haul Road	0.75 miles	None
18	Ash Ponds	≈360 acres	None
19	Mine Conveyor Baghouse	1,500 TPY	MD-247
N/A	Diesel-Fired Emergency Generator Engine - Unit 1	112 hp	None
N/A	Diesel-Fired Emergency Generator Engine - Unit 2	130 hp	None
N/A	Diesel-Fired Emergency Generator Engine - Unit 3	261 hp	None
N/A	Diesel-Fired Emergency Generator Engine - FGD	157 hp	None
N/A	Diesel-Fired Emergency Fire Pump Engine	257 hp	None
N/A	Used Oil-Fired Space Heater	350,000 Btu/hr	None
N/A	Used Oil-Fired Space Heater	235,000 Btu/hr	None

TOTAL FACILITY ESTIMATED EMISSIONS

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

POLLUTANT	EMISSIONS (TPY)
CRITERIA POLLUTANT EMISSIONS	
Particulate Matter ¹	9,301
PM ₁₀ Particulate Matter ¹	8,582
Sulfur Dioxide (SO ₂) ²	18,124
Nitrogen Oxides (NO _X) ³	15,140
Carbon Monoxide (CO) ⁴	725
Volatile Organic Compounds (VOCs) ⁴	86
HAZARDOUS AIR POLLUTANT (HAP) EMISSIONS ⁴	99

Estimates based on emission estimates in the operating permit application for units 10, 11, 12, 13, 14, 16, 17, and 18 and the emission limits found in condition F6 of this permit and emissions calculated from the potential heat input values for the three boilers (Source Emissions Points Table) at the limit found in condition F5 (a)(ii).

² Estimate based upon condition AR-2 of this permit.

³ From WAQSR Chapter 6, Section 2 Permit MD-403.

⁴ Estimates taken from the operating permit application.

FACILITY-SPECIFIC PERMIT CONDITIONS

Facility-Wide Permit Conditions

- (F1) PERMIT SHIELD [WAQSR Ch 6, Sec 3 (k)] (Modified November 29, 2005)

 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of January 16, 2004, the original permit renewal issuance date.
- (F2) ACID RAIN [WAQSR Ch 6, Sec 3 (h)(i)(A)(II)][W.S. 35-11-212 (a)]
 Where an applicable requirement of this operating permit is more stringent than an applicable requirement of the Acid Rain portion of this permit, both shall apply to the permittee and are enforceable by EPA and the Division.
- (F3) TITLE IV ALLOWANCES [WAQSR Ch 6, Sec 3 (h)(i)(D)][W.S. 35-11-212 (a)] Emissions from this facility shall not exceed any allowances that the permittee lawfully holds under title IV of the Clean Air Act or the regulations promulgated thereunder.

Source-Specific Permit Conditions

- (F4) VISIBLE EMISSIONS [WAQSR Ch 3, Sec 2]
 - Unless a lower limit is specified elsewhere in this permit, visible emissions of any contaminant discharged into the atmosphere from any single source of emission shall be limited as follows:
 - (a) 40 percent opacity for sources which commenced construction before February 10, 1970; and
 - (b) 20 percent opacity, except for one period or periods aggregating not more than six minutes in any one hour of not more than 40 percent opacity, for sources which commenced construction on or after February 10, 1970.
- (F5) COAL-FIRED BOILER EMISSIONS [WAQSR Ch 3, Sec 3; Ch 3, Sec 2; & Ch 6, Sec 2 Permit MD-403]
 - (a) Emissions from each boiler stack (Sources 1, 2, and 3) shall be limited to:
 - (i) $0.75 \text{ lb/MMBtu of heat input of NO}_X$;
 - (ii) 0.8963/I^{0.1743} lb/MMBtu of heat input of particulate emissions where I=boiler heat input in MMBtu/hr from 10 to 10,000 MMBtu/hr; and
 - (iii) 40 percent opacity.
 - (b) The total annual NO_X emissions from boilers 1, 2, and 3 shall not exceed 15,140 tons per year. (Additional NO_X requirements are contained in the "Acid Rain" portion of this permit. SO₂ emission limits/requirements for boilers 1, 2, and 3 are listed under the "State Only" and "Acid Rain" portions of this permit.)
- (F6) BAGHOUSE EMISSIONS

[WAQSR Ch 3, Sec 2; Ch 6, Sec 2 Permits MD-247 and MD-867 and 40 CFR 60 Subpart Y] Visible and particulate emissions from each coal and ash handling baghouse shall be limited as follows:

Source ID Number	Source Description	Particulate Emission Limit (lb/hr)	Particulate Emission Limit (gr/dscf)	Opacity Limit (percent)
4	Coal Stockpile Reclaim Tunnel	2.1	0.02	20
5	Unit #2 Coal Bunker Exhauster & Conveyor Gallery Area	1.4	0.02	20
6	Unit #3 Coal Bunker Exhauster & Conveyor Gallery Area	0.9	0.02	20
7	Unit #1 Coal Bunker Exhauster	0.2	0.02	20
8	Fly Ash Loadout Silo	0.3	0.02	20
19	Mine Conveyor Baghouse (a)	0.9		less than 20

(a) Subject to 40 CFR 60 Subpart Y

- (F7) DIESEL-FIRED EMERGENCY EQUIPMENT EMISSIONS [WAQSR Ch 3, Sec 2]
 Visible emissions from each diesel-fired emergency generator and 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.
- (F8) FUEL BURNING EQUIPMENT EMISSIONS [WAQSR Ch 3, Sec 3] (Modified November 29, 2005) NO_X emissions from each used oil-fired space heater shall be limited to 0.60 lb/MMBtu of heat input.

(F9) OPERATION, MAINTENANCE AND COMPLIANCE PLANS [WAQSR Ch 6, Sec 3 (h)(i)(A); January 14, 2002 Division letter]

- The permittee shall conduct preventative maintenance and inspections on the baghouse not subject to CAM (Unit 7) and on each diesel-fired emergency generator and fire pump engine in accordance with the Operation and Maintenance Plan in Appendix A of this permit.
- (b) The permittee shall follow the provisions of the Fugitive Dust Compliance Plan in Appendix I of this permit for mitigating and preventing the occurrence of fugitive dust.

Testing Requirements

(F10) BOILER EMISSIONS TESTING [W.S. 35-11-110]

- (a) The permittee shall measure particulate emissions from each boiler stack (units 1, 2, and 3) at least annually for comparison with the emission limit specified in condition F5 of this permit.
 - (i) Methods 1-4 and 5 shall be used to measure particulate emissions.
 - (ii) ASTM method D-271-64 or ASTM method D-2015-62T shall be used to calculate the heat content of the coal.
- (b) Testing shall be conducted in accordance with WAQSR Chapter 5, Section 2(h).

(F11) ADDITIONAL EMISSIONS TESTING [W.S. 35-11-110]

- (a) The Division reserves the right to require additional testing as provided under condition G1 of this permit. Should testing be required:
 - (i) Methods 1-5 shall be used to measure particulate emissions;
 - (ii) Methods 1 -4 and 7 or 7E shall be used to measure NO_X emissions; and
 - (iii) Methods 9 shall be used to measure visible emissions.
 - (iv) For other pollutants, methods approved by the Administrator 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

(F12) BOILER STACK EMISSIONS MONITORING

[WAQSR Ch 7, Sec 2, Ch 6, Sec 3 (h)(i)(C)(I), and Ch 7, Sec 3(c)(ii)]

- (a) (i) The permittee shall adhere to the compliance assurance monitoring (CAM) plan, attached as Appendix F of this permit, for particulate emissions from boilers 1, 2, and 3 and shall conduct monitoring as follows:
 - (A) The permittee shall continuously measure the parameter(s) specified in the CAM plan for each unit.
 - (B) An indicator measurement outside the ranges specified in the CAM plan shall prompt immediate inspection and corrective actions.
 - (ii) The permittee shall follow all other applicable requirements under conditions CAM-1 through CAM-4 of this permit.
- (b) The NO_X emissions monitoring requirements of 40 CFR Part 75 shall serve as periodic monitoring for emissions of this pollutant.
- (c) (i) For boilers 1 and 2, the permittee shall calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions from boilers 1 and 2 as required by 40 CFR Part 75.
 - (ii) For boiler 3, the permittee shall perform quarterly Method 9 observations, in addition to, at minimum, daily observations for visible emissions to assure compliance with the opacity

limit under condition F5 (a)(iii) of this permit. The daily observations shall be conducted by personnel certified to perform Method 9 observations.

- (A) If the opacity of visible emissions, as determined by a certified observer during daily observations, approaches the limit under condition F5 (a)(iii), a Method 9 observation shall be performed.
- (B) If visibility or weather conditions prevent the daily opacity observation from being conducted, the daily observation shall be rescheduled to as soon after the visibility or weather conditions improve as possible. The visible emissions observer shall determine visibility or other conditions which prevent the opacity observations from being made in accordance with the procedures in Method 9 as contained in 40 CFR 60, Appendix A. The permittee shall document weather conditions which hamper observations.
- (d) The SO₂ and either oxygen or carbon dioxide emissions monitoring requirements of 40 CFR Part 75 shall serve as periodic monitoring for SO₂ emissions from boilers 1, 2 and 3.
 - (ii) Additional SO₂ monitoring requirements are contained in conditions S6 and S7 of this permit.

(F13) BAGHOUSE EMISSIONS MONITORING [WAQSR Ch 6, Sec 3(h)(i)(C)(I) and Ch 7, Sec 3(c)(ii)]

- (a) The permittee shall adhere to the compliance assurance monitoring (CAM) plan, attached as Appendix F of this permit, for particulate emissions from each baghouse (units 4, 5, 6, 8, and 19), and shall conduct monitoring as follows:
 - (i) The permittee shall conduct, at minimum, daily observations of visible emissions from the baghouses to identify maintenance needs and the presence of visible emissions. The visual observations shall be conducted by a person who is educated on the general procedures for determining the presence of visible emissions but not necessarily certified to perform Method 9 observations.
 - (ii) Observation of visible emissions from a baghouse shall prompt immediate inspection for damage, and repair as needed.
- (b) The permittee shall follow all other applicable requirements under conditions CAM-1 through CAM-4 of this permit.
- (c) The permittee shall conduct monitoring for the baghouse controlled source not regulated under CAM (unit 7) as follows:
 - (i) The permittee shall conduct, at minimum, weekly observations of visible emissions from the baghouse (unit 7). The visual observations shall be conducted by a person who is educated on the general procedures for determining the presence of visible emissions but not necessarily certified to perform Method 9 observations.
 - (ii) Observation of visible emissions from a baghouse shall prompt immediate corrective action.
 - (iii) Visual monitoring combined with adherence to the Operation and Maintenance Plan for Material Handling Dust Collectors in Appendix A of this permit shall serve as a surrogate to periodic monitoring for particulate emissions.

(F14) DIESEL-FIRED EMERGENCY EQUIPMENT EMISSIONS MONITORING [WAQSR Ch 6, Sec 3 (h)(i)(C)(I)]

- (a) The permittee shall conduct Method 9 observations of visible emissions from each diesel-fired emergency generator and 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 F7 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 F7 shall trigger maintenance procedures specified in the Operation and Maintenance Plan for Diesel-Fired Equipment in Appendix A of this permit.

(F15) FUEL BURNING EQUIPMENT EMISSIONS MONITORING

[WAQSR Ch 6, Sec 3 (h)(i)(C)(I)] (Modified November 29, 2005)

Periodic monitoring of NO_X and visible emissions from the two used oil-fired space heaters is not required since these emissions from these sources are of trivial environmental importance.

Recordkeeping Requirements

- (F16) TEST RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]
 - (a) For any testing required by the Division under conditions F10 and F11, other than Method 9 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 Method 9 observations required by the Division under condition F11 (a)(iii) of this permit, the permittee shall keep field records in accordance with Section 2.2 of Method 9.
 - (c) 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.
- (F17) BOILER STACK CONTINUOUS NO_X EMISSIONS & OPACITY MONITORING RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]
 - (a) For boilers 1, 2, and 3, the 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 boilers 1 and 2, the opacity 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).
 - (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.
- (F18) VISIBLE EMISSIONS MONITORING RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]
 - (a) For Method 9 visible emissions monitoring required under conditions F12 (c) and F14 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 the opacity limit.
 - (b) For the daily or weekly visible emissions monitoring required under conditions F12 (c) and F13 of this permit, 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.
 - (c) 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.
- (F19) CAM RECORDS [WAQSR Ch 7, Sec 3]
 - (a) For the CAM required for the boilers and baghouse controlled sources under conditions F12 and F13 of this permit, the permittee shall retain on-site at the facility the record of each test, measurement, or observation and support information.
 - (b) The permittee shall also maintain records of corrective actions taken, any written Quality Improvement Plan required pursuant to WAQSR Chapter 7, Section 3(h), any activities undertaken to implement a Quality Improvement Plan, and other supporting information required to be maintained under WAQSR Chapter 7, Section 3.
 - (c) 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.

(F20) MAINTENANCE AND FUGITIVE DUST MITIGATION RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]

- The permittee shall maintain records of inspection activities and corrective/preventative maintenance performed on the baghouse (unit 7) and diesel-fired emergency equipment engines. 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 A of this permit.
- (b) The permittee shall maintain records of fugitive dust prevention and mitigation activities conducted as described in the Fugitive Dust Compliance Plan in Appendix I of this permit. The records shall include, as applicable:
 - (i) Corrective actions resulting from high PM₁₀ levels detected;
 - (ii) Observation of fugitive dust and resulting corrective action; and
 - (iii) An explanation for any deviation from the Fugitive Dust Compliance Plan.
- (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.

Reporting Requirements

- (F21) TEST REPORTS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)]
 - (a) The permittee shall report the results of the particulate emissions tests required under condition F10 and any testing that may be required under condition F11 within 45 days of conducting the tests.
 - (b) The reports shall include the information specified under condition F16 of this permit and shall be submitted to the Division in accordance with condition G4.
- (F22) EXCESS EMISSIONS AND MONITORING SYSTEM PERFORMANCE REPORTS FOR OPACITY & NO_X EMISSIONS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III) & Ch 6, Sec 2 Permit MD-403]
 - (a) The permittee shall submit an excess emissions and monitoring systems performance report for opacity from boilers 1 and 2 and for NO_X emissions from boilers 1, 2, and 3 (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 the boilers. 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 inoperative, repaired, or adjusted, such information shall be stated in the report.
 - (v) One summary report form for each pollutant monitored at each affected facility in a format approved by the Division.
 - (A) If the total duration of excess emissions for the reporting period is less than one percent of the total operating time for the reporting period and continuous monitoring system downtime for the reporting period is less than five percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in paragraph (a) of this condition need not be submitted unless requested by the Administrator.
 - (B) If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total continuous

monitoring system downtime for the reporting period is five percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in paragraph (a) of this condition shall both be submitted.

- (b) For the purpose of reporting under this condition, excess emissions are defined as follows:
 - (i) Any fixed three-hour period during which average NO_X emissions from boilers 1, 2, or 3 exceed 0.75 lb/MMBtu of heat input.
 - (ii) Any six-minute period during which the average opacity of emissions from boilers 1 or 2 exceeds 40 percent.
 - (iii) Any calendar year during which the total annual NO_X emissions from boilers 1, 2, and 3 exceed 15,140 tons.
- 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).
- (d) The permittee shall submit a quarterly report by the 15th day of the following month for the first two quarters of the calendar year and a monthly report the final six months of each calendar year listing the total NO_X emissions for each boiler per calendar day, as determined from the continuous monitoring system certified per the requirements of 40 CFR Part 75, with a calendar year-to-date total for all boilers.
- (e) The reports shall be submitted to the Division in accordance with condition G4 of this permit.

(F23) VISIBLE EMISSIONS MONITORING REPORTS

[WAQSR Ch 6, Sec 3 (h)(i)(C)(III)] (Modified November 29, 2005)

- (a) The *permittee* shall report *the following* to the Division by January 31 and July 31 each year:
 - (i) The results of the visible emissions monitoring required under conditions F12 (c), F13, and F14 of this permit, based on records kept in accordance with condition F18, and a summary of corrective action(s) taken upon detection(s) of noncompliance with the opacity limit.
 - (ii) When no excess emissions have occurred during the reporting period, this shall be stated in the report.
 - (iii) All instances of deviations from the conditions of this permit must be clearly identified in each report.
- (b) The reports shall be submitted to the Division in accordance with condition G4 of this permit.

(F24) CAM MONITORING REPORTS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III) and Ch 7, Sec 3 (i)(i)]

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

 The results of Compliance Assurance Monitoring (CAM) required under conditions F12 and F13 of this permit for the boilers and baghouse controlled equipment shall include the following:
 - (i) Summary information on the number, duration, and cause of excursions, as applicable, and the corrective actions taken;
 - (ii) Summary information on the number, duration, and cause for monitor downtime incidents; and
 - (iii) 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.

(F25) MAINTENANCE AND FUGITIVE DUST MITIGATION REPORTS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)]

(a) The permittee shall report to the Division by January 31 and July 31 each year whether the permittee has adhered to the Operation and Maintenance Plan for Material Handling Dust Collectors (unit 7) and Diesel Engines in Appendix A of this permit as required by condition F9(a).

- (i) Any deviations from the Operation and Maintenance Plan must be clearly identified in each report.
- (ii) If the permittee has adhered to the Operation and Maintenance Plan during the reporting period, this shall be stated in the report.
- (b) The permittee shall report to the Division by January 31 and July 31 each year whether the permittee has adhered to the Fugitive Dust Compliance Plan in Appendix I of this permit as required by condition F9(b).
 - (i) Any deviations from the Fugitive Dust Compliance Plan must be clearly identified in each report.
 - (ii) If the permittee has adhered to the Fugitive Dust Compliance Plan during the reporting period, this shall be stated in the report.
- (c) The reports shall be submitted to the Division in accordance with condition G4 of this permit.

(F26) REPORTING EXCESS EMISSIONS & DEVIATIONS FROM PERMIT REQUIREMENTS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)]

- (a) Reporting requirements for excess opacity (for boilers 1 and 2) and NO_X emissions (for boilers 1, 2, and 3) are described under condition F22 of this permit.
- (b) 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.
- 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.)
- (d) 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 November 29, 2005)

(F27) SULFUR DIOXIDE EMISSIONS INVENTORY REQUIREMENTS [WAQSR Ch 14, Sec 3]

- (a) The permittee shall report SO₂ emissions annually as required by WAQSR Chapter 14, Section 3. SO₂ emissions shall be estimated in accordance with Chapter 14, Section 3 (b), and adjusted in accordance with Chapter 14, Section 3 (c) if necessary.
- (b) Sulfur Dioxide Emission Inventory Records.
 - (i) The permittee shall maintain all records used in the calculation of SO₂ 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 Chapter 14, Section 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 SO₂.
 - (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 SO₂ 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 SO₂ emissions in 1998, the permittee shall adjust reported SO₂ emissions to be comparable to the emission monitoring or calculation method that was used in 1998. The calculations that are used to make this adjustment shall be included with the annual emission report.
 - (iv) For acid rain sources, the permittee shall submit a summary report of annual SO2 emissions that were reported to the EPA under 40 CFR Part 75.
 - (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 60, Appendix A, Test Methods 2F, 2G, or 2H are used to measure stack flow rate, the permittee shall adjust reported SO₂ emissions to ensure they are comparable to 1999 emissions. The adjustment may be calculated using the methods in Chapter 14, Section 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 Y REQUIREMENTS

(Subpart Y is provided in Appendix C)

(P60-Y1) SUBPART Y REQUIREMENTS [40 CFR 60 Subpart Y]

The permittee shall meet all requirements of 40 CFR 60 Subpart Y, as they apply to the coal handling facilities listed in condition F6 of this permit.

- (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, gases which exhibit 20 percent opacity or greater as specified in §60.252 (c).
- (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.

Permit No. 3-1-121-1

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

(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, and 3 (units 1, 2, and 3) and the baghouse controlled sources (units 4, 5, 6, 8, and 19). 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.

COMPLIANCE CERTIFICATION AND SCHEDULE

Compliance Certification [WAQSR Ch 6, Sec 3 (h)(iii)(E)] (Modified November 29, 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 particulate emissions from boilers 1, 2, and 3, the permittee shall assess compliance with condition F5(a)(ii) of this permit by conducting testing required under condition F10 and monitoring required under condition F12(a).
 - (ii) For visible emissions from boilers 1 and 2, the permittee shall assess compliance with condition F5(a)(iii) of this permit by conducting monitoring required under condition F12(c).
 - (iii) For visible emissions from boiler 3, the permittee shall assess compliance with condition F5(a)(iii) of this permit by conducting monitoring required under condition F12(c).
 - (iv) For NO_X emissions from boilers 1, 2, and 3, the permittee shall assess compliance with conditions F5(a)(i) and (b) of this permit by conducting monitoring required under 40 CFR Part 75.
 - (v) For particulate and visible emissions from baghouses subject to CAM (unit 4, 5, 6, 8 and 19) the permittee shall assess compliance with condition F6 of this permit by conducting monitoring required under condition F13.
 - (vi) For particulate and visible emissions from the baghouse not subject to CAM (unit 7) the permittee shall assess compliance with condition F6 of this permit by conducting monitoring required under condition F13 and by reviewing baghouse maintenance and inspection records kept in accordance with condition F20.
 - (vii) For visible emissions from the diesel-fired emergency equipment, the permittee shall assess compliance with condition F7 of this permit by conducting monitoring required under condition F14 and by reviewing maintenance and inspection records kept in accordance with condition F20.
 - (viii) For preventative maintenance and inspections required to be conducted on facility equipment, the permittee shall assess compliance with condition F9(a) of this permit by reviewing maintenance records kept in accordance with condition F20(a).
 - (ix) For prevention and mitigation of fugitive dust, the permittee shall assess compliance with condition F9(b) of this permit by reviewing records kept in accordance with condition F20(b).
 - (x) For the sulfur dioxide emissions inventory, the permittee shall assess compliance with condition F27 (a) of this permit by reviewing records kept in accordance with condition F27 (b) and verifying reports were submitted in accordance with condition F27 (c).
 - (xi) The permittee shall assess compliance with the ambient monitoring requirement under condition S14 of this permit by reviewing records kept in accordance with condition S15. (This is a state only requirement.)
 - (xii) For SO₂ emissions from boilers 1, 2, and 3, the permittee shall assess compliance with condition S4 of this permit by conducting monitoring required under conditions S6 and S7. (This is a state only requirement.)
 - (xiii) For the scrubber ponds, the permittee shall assess compliance with condition S17 of this permit by reviewing records kept in accordance with condition S18. (This is a state only requirement.)
 - (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.
- (C4) No compliance schedule required. The PacifiCorp Naughton Plant's Boiler 3 is exempt from the continuous opacity monitoring requirements of 40 CFR Part 75.14 (a). (See Appendix H.) (Modified November 29, 2005)

GENERAL PERMIT CONDITIONS

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

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

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

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

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

The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was (G3)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.
 - Submissions to the Division. (a)
 - Any submissions to the Division including reports, certifications, and emission inventories (i) 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.
 - 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.

<u>Compliance</u>: [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.

<u>Duty to Provide Information</u>: [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:
 - 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;
 - 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 (1)]

- (G17) The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to any 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;
 - 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 November 29, 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.
 - 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 wetapplied 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 ozonedepleting 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 November 29, 2005)

(G25) Any BART (Best Available Retrofit Technology) eligible facility, or facility which has actual emissions of SO₂ greater than 100 TPY in calendar year 2000 or any subsequent year, shall comply with the applicable requirements of WAQSR Ch 14, Sections 1 through 3, with the exceptions described in sections 2(c) and 3(a).

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	50 micrograms per cubic meter	annual arithmetic mean	2 (a)
matter	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

Permit No. 3-1-121-1 Page 23

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) SO₂ EMISSIONS FROM BOILERS 1, 2, & 3 [WAQSR Ch 3, Sec 4 (d)]
 - (a) SO₂ emissions from boilers 1 and 2 shall be limited to 1.2 lb/MMBtu of heat input calculated on the basis of two-hour averages.
 - (b) SO₂ emissions from boiler 3 shall be limited to 0.5 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 SO₂ emissions testing 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) SO₂ EMISSIONS MONITORING FOR BOILERS 1, 2, & 3 [WAQSR Ch 6, Sec 3 (h)(i)(C)(I)] The SO₂ and either oxygen or carbon dioxide emissions monitoring requirements of 40 CFR Part 75 shall serve as periodic monitoring for SO₂ emissions. The SO₂ pollutant and either oxygen or carbon dioxide concentrations monitored under 40 CFR Part 75 may be used to calculate SO₂ emissions in lb/MMBtu for excess emissions reporting under condition S12 of this permit.
- (S7) BOILER HEAT INPUT MONITORING [WAQSR Ch 6, Sec 3 (h)(i)(C)(I)]

 The permittee shall determine the monthly average heat input for each boiler (Sources 1, 2, and 3) based on the amount and Btu content of the coal fired in each boiler to assure compliance with the SO₂ emission limits of WAQSR Chapter 3, Section 4.

Recordkeeping Requirements

- (S8) SO₂ EMISSIONS TEST RECORDS [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.

- (S9) SO₂ EMISSIONS MONITORING RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]
 - (a) The SO₂ 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) 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.

(S10) BOILER HEAT INPUT RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]

- (a) The permittee shall record the coal usage, coal Btu content, and monthly average heat input for each boiler as determined under condition S7 of this permit.
- (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

(S11) SO₂ EMISSIONS 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 condition S5 of this permit within 45 days of conducting the tests. The reports shall include the information specified under condition S8 (a) and shall be submitted to the Division in accordance with condition G4 of this permit.

- (S12) EXCESS EMISSIONS AND MONITORING SYSTEM PERFORMANCE REPORTS FOR SO₂ EMISSIONS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)]
 - (a) The permittee shall submit an excess emissions and monitoring systems performance report for SO₂ emissions from boilers 1, 2, and 3 (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 the boilers. 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 inoperative, repaired, or adjusted, such information shall be stated in the report.
 - (v) One summary report form for each pollutant monitored at each affected facility in a format approved by the Division.
 - (A) If the total duration of excess emissions for the reporting period is less than one percent of the total operating time for the reporting period and continuous monitoring system downtime for the reporting period is less than five percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in paragraph (a) of this condition need not be submitted unless requested by the Administrator.
 - (B) If the total duration of excess emissions for the reporting period is one percent or greater of the total operating time for the reporting period or the total continuous monitoring system downtime for the reporting period is five percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in paragraph (a) of this condition shall both be submitted.
 - (b) For the purpose of reporting under this condition, excess emissions are defined as follows:
 - (i) Any two-hour period during which the average SO₂ emissions from boilers 1 or 2 exceed 1.2 lb/MMBtu of heat input.

- (ii) Any two-hour period during which the average SO_2 emissions from boiler 3 exceed 0.5 lb/MMBtu of heat input.
- 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).
- (d) The reports shall be submitted to the Division in accordance with condition G4 of this permit.

(S13) BOILER HEAT INPUT REPORTS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)]

- The permittee shall report to the Division by January 31 and July 31 each year the monthly average heat input for each boiler as determined under condition S7 of this permit. The reports shall list for each boiler the heat input for each month of the previous calendar half.
- (b) The reports shall be submitted to the Division in accordance with condition G4 of this permit.

Ambient Monitoring: [W.S. 35-11-110]

Monitoring Requirements

(S14) AMBIENT MONITORING [W.S. 35-11-110]

The permittee shall operate an ambient monitor approved by the Division to monitor PM_{10} concentrations. The monitor shall be maintained and operated in accordance with 40 CFR Parts 50 and 58.

Recordkeeping Requirements

(S15) AMBIENT MONITORING RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]

- (a) The permittee shall maintain records of data generated by the ambient monitor such that compliance with condition S14 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.

Reporting Requirements

(S16) AMBIENT MONITORING REPORTS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)]

A summary of the ambient monitoring data retained in accordance with condition S15 of this permit shall be submitted to the Division in accordance with condition G4 of this permit within 60 days of the end of each calendar quarter.

Scrubber Pond Monitoring: [April 9, 1998 WAQSR Ch 6, Sec 2 (k) Permit Waiver]

Monitoring Requirements

(S17) SCRUBBER POND OPERATION & MONITORING

[April 9, 1998 WAQSR Ch 6, Sec 2 (k) Permit Waiver]

The permittee shall operate and monitor the scrubber ponds as described in the FGD Pond Operations and Monitoring Plan in Appendix E of this permit.

Recordkeeping Requirements

(S18) SCRUBBER POND MONITORING RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]

The permittee shall retain on-site at the facility all monitoring records described in the FGD Pond Operations and Monitoring Plan in Appendix E of this permit for a period of at least five years from the date such records are generated.

Reporting Requirements

(S19) SCRUBBER POND MONITORING REPORTS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)]

The permittee shall report to the Division as described in the FGD Pond Operations and Monitoring Plan in Appendix E of this permit. Any written 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:

Naughton Plant

Operated by:

PacifiCorp

ORIS code:

4162

Effective:

Same as operating permit

Acid Rain Permit Contents

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

AR-1) Statement of Basis

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

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

		2003	2004	2005	2006	2007
	SO ₂ allowances under Tables 2, 3, or 4 of 40 CFR part 73.	5201*	5201*	5201*	5201*	5201*
Unit 1	NO _X limit	this unit, effectiv NO _X emissions semission limitation input greater than Under the plan, to in the plan shall lead to the same compliance with except that for an 40 CFR 76.7. If the prior sentence (as then this unit shad contemporaneous only when the Utilia addition to the applicable requires	the from calendar yethall not exceed the on of 0.58 lb/MMI in 15,987,040 MMI in 16,987,040 MMI in 16,9	sion approves a Notars 2000 through 2 annual average all Btu. In addition, this Btu. The annual average all to the Btu-weighth been operated, dission limitations units, the applicable esentative demons FR 76.11(d)(1)(ii)(a in compliance for limitation and annual (a)(2), approval of the Quality has also a compliance plan, this part 76, including covering excess em	2007. Under the platernative contemporal is unit shall not have ge NO _X emission rated annual average uring the same perioder 40 CFR 76.5, emission limitation trates that the requirates that the requirates that the requirate heat input limit. The averaging plans proved this average unit shall comply the duty to reapply	an, this unit's braneous we an annual heat ate for the units ate for the units at NO _X emission od of time, in 76.6, or 76.7, as shall be under irement of the ar under the plan, lternative shall be final ging plan.

		2003	2004	2005	2006	2007
	SO ₂ allowances under Tables 2, 3, or 4 of 40 CFR part 73.	6741*	6741*	6741*	6741*	6741*
Unit 2	NO _X limit	this unit, effective NO _X emissions is emission limitatic input greater that under the plan, to in the plan shall rate for the same compliance with except that for at 40 CFR 76.7. If the prior sentence (at then this unit shall contemporaneous under the Unit of the applicable requires the prior to the applicable requires the prior to the applicable requires that the prior sentence where the prior that the pr	the from calendar yeshall not exceed the on of 0.54 lb/MMI in 19,034,436 MMI he actual Btu-weigh be less than or equivalent the applicable emity early election until the designated represent for the designated represent for the designation of the described NO _X coements of 40 CFR	sion approves a Nears 2000 through 2 annual average al Btu. In addition, th Btu. In addition, th Btu. In addition, th Btu. In addition, th Btu. In addition, th Btu. In addition, th Btu. In addition, th Btu. In addition, th Btu. In addition, th Btu. In addition, th Btu. In addition average al Btu. In addition, th Btu. In addition and annual average al acceptance for a second annual acc	2007. Under the platernative contemporal is unit shall not have ge NO _X emission rated annual average uring the same perioder 40 CFR 76.5, emission limitation trates that the request hat year with its a lial heat input limit. The averaging plan is perioder annual comply the duty to reapply the duty to reapply	an, this unit's braneous we an annual heat ate for the units e NO _X emission iod of time, in 76.6, or 76.7, as shall be under irement of the ar under the plan, alternative shall be final ging plan.

Permit No. 3-1-121-1

		2003	2004	2005	2006	2007
	SO ₂ allowances under Tables 2, 3, or 4 of 40 CFR part 73.	5214*	5214*	5214*	5214*	5214*
Unit 3	NO _X limit	this unit, effective NO _X emissions in semission limitation input greater than under the plan, the plan shall be the prior sentence with the prior sentence (as then this unit shad contemporaneous accordance with the plan shall be the policial between the plan shall be the pl	e from calendar ye hall not exceed the on of 0.49 lb/MMI in 30,371,334 MMI he actual Btu-weig be less than or equanits had they each the applicable emity early election up he designated representations and emission late 40 CFR 72.40(bah Division of Air described NO _X coements of 40 CFR	sion approves a Notars 2000 through 2 annual average al 3tu. In addition, this 3tu. The annual average al 3tu. In addition, this 3tu. The annual average al 3tu. In addition, this 3tu. The annual average al 3tu. In addition, this 3tu. The annual average al 4tu. The annual average al 4tu. The annual average al 5tu. The annual avera	2007. Under the platernative contemporals unit shall not have as unit shall not have as the annual average uring the same perioder 40 CFR 76.5, emission limitation trates that the requirates that the requirates that year with its a heat input limit. The averaging plan is proved this average unit shall comply the duty to reapply the	an, this unit's braneous we an annual heat atte for the units and NO _X emission od of time, in 76.6, or 76.7, as shall be under rement of the r under the plan, atternative thall be final ging plan.

^{*} The number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. The aforementioned condition does not necessitate a revision to the unit 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 D of this operating permit.

Page 30

SUMMARY OF SOURCE EMISSION LIMITS AND REQUIREMENTS (Modified November 29, 2005)

Source ID#: 1 (NADB #1) Source Description: Electric Utility Steam Generating Unit

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	0.8963/I ^{0.1743} lb/MMBtu of heat input where I=boiler heat input in MMBtu/hr [F5] 40% opacity [F5]	WAQSR Ch 3, Sec 2	Test annually [F10]	Continuous opacity and parameter monitoring[F12]	Test records [F16] Monitoring Records [F17, F18, and F19]	Test Reports [F21] Monitoring Reports [F22 and F24] Report Excess Emissions and Permit Deviations[F26]
SO_2	1.2 lb/MMBtu of heat input (2-hour average basis) [S4]	WAQSR Ch 3, Sec 4	[85]	Continuous Emissions Monitoring [S6] Boiler Heat Input Monitoring [S7]	Test Records [S8] Monitoring Records [S9] Heat Input Records [S10]	Test Reports [S11] Excess Emissions & Monitoring System Reports [S12] Heat Input Reports [S13] Report Excess Emissions and Permit Deviations[F26]
	Title IV Allowances [F3] 5,201 TPY [AR-2]	WAQSR Ch 6, Sec 3 (h)(i)(D) & W.S. 35- 11-212(a) 40 CFR 73	None	Appendix D	Appendix D	Appendix D
NOx	0.75 lb/MMBtu of heat input [F5]	WAQSR Ch 3, Sec 3	[F11]	Continuous Emissions Monitoring [F12]	Test Records [F16] Monitoring Records [F17]	Test Reports [F21] Excess Emissions & Monitoring System Reports [F22] Report Excess Emissions and Permit Deviations[F26]
	0.58 lb/MMBtu and ≤ 15,987,040 MMBtu/yr [AR-2]	40 CFR 76	None	Appendix D	Appendix D	Appendix D

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

Permit No. 3-1-121-1

Source ID#: 2 (NADB #2) Source Description: Electric Utility Steam Generating Unit

					ı.	
Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	0.8963/I ^{0.1743} lb/MMBtu of heat input where I=boiler heat input in MMBtu/hr [F5] 40% opacity [F5]	WAQSR Ch 3, Sec 2	Test annually [F10]	Continuous opacity and parameter monitoring[F12]	Test records [F16] Monitoring Records [F17, F18, and F19]	Test records [F16] Monitoring Records [F17, Monitoring Reports [F22 and F24 Report Excess Emissions and Permit Deviations[F26]
$^{\circ}$ SO $^{\circ}$	1.2 lb/MMBtu of heat input (2-hour average basis) [S4]	WAQSR Ch 3, Sec 4	[85]	Continuous Emissions Monitoring [S6] Boiler Heat Input Monitoring [S7]	Test Records [S8] Monitoring Records [S9] Heat Input Records [S10]	Test Reports [S11] Excess Emissions & Monitoring System Reports [S12] Heat Input Reports [S13] Report Excess Emissions and Permit Deviations[F26]
	Title IV Allowances [F3] 6,741 TPY [AR-2]	WAQSR Ch 6, Sec 3 (h)(i)(D) & W.S. 35- 11-212(a) 40 CFR 73	None	Appendix D	Appendix D	Appendix D
×ON	0.75 lb/MMBtu of heat input [F5]	WAQSR Ch 3, Sec 3	[F11]	Continuous Emissions Monitoring [F12]	Test Records [F16] Monitoring Records [F17]	Test Records [F16] Test Reports [F21] Monitoring Records [F17] Excess Emissions & Monitoring System Reports [F22] Report Excess Emissions and Permit Deviations[F26]
	0.54 lb/MMBtu and ≤ 19,034,436 MMBtu/yr [AR-2]	40 CFR 76	None	Appendix D	Appendix D	Appendix D

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

Source ID#: 3 (NADB #3) Source Description: Electric Utility Steam Generating Unit

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	0.8963/I ^{0.1743} lb/MMBtu of heat input where I=boiler heat input in MMBtu/hr [F5] 40% opacity [F5]	WAQSR Ch 3, Sec 2 WAQSR Ch 3, Sec 2	Test annually [F10]	Continuous parameter monitoring and quarterly Method 9 and daily observations [F12]	Test records [F16] Monitoring Records [F18 and F19]	Continuous parameter Test records [F16] Test Reports [F21] Monitoring and quarterly Monitoring Records [F18] Monitoring Reports [F23 and F24 Report Excess Emissions and Permit Deviations[F26]
SO_2	0.5 lb/MMBtu of heat input (2-hour average basis) [S4]	WAQSR Ch 3, Sec 4	[SS]	Continuous Emissions Monitoring [S6] Boiler Heat Input Monitoring [S7]	Test Records [S8] Monitoring Records [S9] Heat Input Records [S10]	Test Reports [S11] Excess Emissions & Monitoring System Reports [S12] Heat Input Reports [S13] Report Excess Emissions and Permit Deviations[F26]
	Title IV Allowances [F3] 5,214 TPY [AR-2]	WAQSR Ch 6, Sec 3 (h)(i)(D) & W.S. 35- 11-212(a) 40 CFR 73	None	Appendix D	Appendix D	Appendix D
NO _x	0.75 lb/MMBtu of heat input [F5]	WAQSR Ch 3, Sec 3	[F11]	Continuous Emissions Monitoring [F12]	Test Records [F16] Monitoring Records [F17]	Test Reports [F21] Excess Emissions & Monitoring System Reports [F22] Report Excess Emissions and Permit Deviations[F26]
	0.49 lb/MMBtu and ≤ 30,371,334 MMBtu/yr [AR-2]	40 CFR 76	None	Appendix D	Appendix D	Appendix D

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

Permit No. 3-1-121-1

Source ID#: Sources 4, 5, 6, 8 and 19 Source Description: Material Handling Dust Collectors for Coal & Ash Handling Facilities (CAM)

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	Particulate [b/hr limits [F6] 0.02 gr/dscf (units 4, 5, 6, and 8) [F6] 20 Opacity [F6] Less than 20 percent opacity (unit	WAQSR Ch 6, Sec 2 If required Permit MD-867and [F11] Permit MD-247 40 CFR 60 Subpart Y		Visible emissions Test Records [F16] observations [F13] Monitoring Records F19] NSPS Records for s [P60-Y2]	Visible emissions Test Records [F16] observations [F13] Monitoring Records [F18 and F19] NSPS Records for source #19 [P60-Y2]	Test Reports [F21] Monitoring Reports [F23 and F24] Report Excess Emissions and Permit Deviations[F26]
	19) [F0 & F00-11]					

Source ID#: Source 7 Source Description: Material Handling Dust Collectors (non-CAM)

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	Particulate 0.2 lb/hr limit [F6] 0.02 gr/dscf [F6] 20 Opacity Limits [F6] Operation & Maintenance Plan [F9]	WAQSR Ch 6, Sec 3 If required (h)(i)(A) [F11]		Visible emissions observations [F13]	Visible emissions Test Records [F16] Test Reports [F21] observations [F13] Monitoring Records [F18] Monitoring Reports [F23] Maintenance Records (source 7) Maintenance Reports [F25] [F20] Report Excess Emissions ar Permit Deviations[F26]	Test Reports [F21] Monitoring Reports [F23] Maintenance Reports [F25] Report Excess Emissions and Permit Deviations[F26]

Source ID#: N/A Source Description: Diesel-Fired Emergency Equipment

Emi	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate 30% opacity [F7]	[F7]	WAQSR Ch 3, Sec 2 [F11]	[F11]	Semi-annual	Test Records [F16]	Test Reports [F21]
O & M Plan [F9]	[F9]	WAQSR Ch 6, Sec 3		Observations [F14]	Observations [F14] Monitoring Records [F18]	Monitoring Reports [F23]
		(h)(i)(A)			Maintenance Records [F20]	Report Excess Emissions and
						Permit Deviations[F26]
						Maintenance Reports [F25]

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

Source ID#: N/A Source Description: Used-Oil Fired Space Heaters (2)

Pollutant	Enussions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	Particulate 20% Opacity [F4]	WAQSR Ch 3, Sec 2	If required [F11]	None [F15]	Test Records [F16]	Test Reports [F21] Report Excess Emissions and Permit Deviations[F26]
×ON	0.60 lb/MMBtu of heat input [F8]	WAQSR Ch 3, Sec 3	[F11]	None [F15]	Test Records [F16]	Test Reports [F21] Report Excess Emissions and Permit Deviations[F26]

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
Particulate	Particulate Operate and Maintain Ambient W.S. 35-11-110 Monitor for PM ₁₀ [S14] Prevent and mitigate fugitive Division letter dust according to plan in Appendix I [F9]	W.S. 35-11-110 January 14, 2002 Division letter	None None	Ambient Monitoring [S14] None	Ambient Monitoring Monitoring Records [S15] [S14] Record prevention and mitigation activities; Appendix I [F20]	Monitoring Reports [S16] Fugitive dust reports [F25] Report Excess Emissions and Permit Deviations[F26]

Source ID#: 15 Source Description: Scrubber Pond SO₂ Emissions

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
SO_2	Operate and Monitor according April 9, 1998 WAQSR to plan in Appendix E [S17] Ch 6, Sec 2 (k) Permit Waiver	April 9, 1998 WAQSR Ch 6, Sec 2 (k) Permit Waiver	None	See Appendix E [S17]	See Appendix E [S18]	See Appendix E [S19] Report Excess Emissions and Permit Deviations[F26]

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 November 29, 2005) AQD Air Quality Division **BACT** Best available control technology (see Definitions) Btu British Thermal Unit CAA Clean Air Act CAM Compliance Assurance Monitoring C.F.R. Code of Federal Regulations CO Carbon monoxide ٥F Degrees Fahrenheit DEQ Wyoming Department of Environmental Quality EPA United States Environmental Protection Agency (see Definitions) **FGD** Flue gas desulfurization Gram(s) g-cal/hr Gram-calorie(s) per hour Gram(s) per horsepower hour g/hp-hr Gallon(s) gal gpm Gallon(s) per minute Grain(s) gr gr/dscf Grain(s)/standard cubic foot (dry basis) H_2S Hydrogen sulfide HAP(s) Hazardous air pollutant(s) hp Horsepower Hour(s) hr ID# Identification number 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 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) OIP 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 TBD To be determined TPHTon(s) per hour TPY Tons per year U.S.C. United States Code Microgram(s) μg

Permit No. 3-1-121-1

Volatile organic compound(s)

Wyoming Air Quality Standards & Regulations (see Definitions)

Wyoming Statute

VOC(s)

WAQSR

W.S.

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:

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

Operation and Maintenance Plan for Material Handling Dust Collectors, Material Handling Dust Suppression Systems, and Diesel Engines

Air Compliance Demonstration Operation and Maintenance Plan For Material Handling Dust Collectors, Material Handling Dust Suppression Systems and Diesel Engines

Naughton Plant

Material Handling Dust Collectors for Coal and Flyash:

Emission Limit/Standard – See Permit Condition (F6) for dust collector specific opacity emission limits.

- Maintain and operate each unit in accordance with manufacturer's
 recommendations and/or operational and maintenance practices (such as
 regularly scheduled preventative maintenance) that have demonstrated
 through periodic inspections that the dust collector is consistently
 operating in a manner that maintains compliance with the opacity limits.
- During the periodic inspection of each material handling system, a visual observation of equipment performance will be made by a "qualified observer".
- If a visual emission or significant accumulation of dust is observed in the vicinity of the dust collector, the specific dust collector will be inspected for damage and repaired as needed. The corrective action taken will be documented in the maintenance records.
- A summary of the visible emissions monitoring and a summary of corrective actions taken will be submitted to the Division by January 31 and July 31 of each year.

2. <u>Material Handling Dust Suppression Systems:</u>

- Maintain and operate each system in accordance with manufacturer's
 recommendations and/or operational and maintenance practices (such as
 regularly scheduled preventative maintenance) that have demonstrated
 through periodic inspections that the dust suppression system is
 consistently operating in a manner that maintains compliance with the
 opacity limits.
- 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".
- If a significant visual emission is observed in the vicinity of the material handling dust suppression system, the specific material handling dust suppression system will be inspected for damage and repaired as needed.

The corrective action taken will be documented in the maintenance records.

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

3. <u>Emergency Diesel Generators and Diesel Fire Pump:</u>

Emission Limit/Standard – Not to exceed 30% opacity limit as defined in Permit Condition (F7).

- Maintain and operate each system in accordance with manufacturer's recommendations and/or operational and maintenance practices (such as regularly scheduled preventative maintenance) that have demonstrated through periodic inspections that the diesel equipment is consistently operating in a manner that maintains compliance with the opacity limits.
- During the periodic operational tests of the units to ensure availability, a visual observation of equipment performance will be made by a "qualified observer".
- If a significant visual emission is observed from the diesel equipment, the engine will be inspected for damage and repaired as needed. The corrective action taken will be documented in the maintenance records.
- Conduct an EPA Method 9 opacity determination at least once every six months.
- A summary of the visible emissions monitoring and a summary of corrective actions taken will be submitted to the Division by January 31 and July 31 of each year.

APPENDIX B

WAQSR Chapter 7, Section 2 Continuous Monitoring Requirements for Existing Sources

Chapter 7, Section 2 Continuous monitoring requirements for existing sources

- (a) The owner or operator of any existing solid fossil fuel fired steam generator with a heat input greater than 250 million BTU per hour shall install, calibrate, operate, and maintain a continuous monitoring system for stack gas opacity.
 - (i) Such continuous monitoring equipment shall be demonstrated by the owners or operators to meet the performance specifications for such equipment as given in 40 CFR part 60, Appendix B.
 - (ii) Such continuous monitoring equipment 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.
 - (iii) The owner or operator of such equipment shall:
 - (A) Record the zero and span drift in accordance with the method prescribed by the manufacturer of such instruments;
 - (B) Subject the instruments to the manufacturer's recommended zero and span check at least once daily unless the manufacturer has recommended adjustments at shorter intervals, in which case such recommendations shall be followed;
 - (C) Adjust the zero and span whenever the 24-hour zero drift or 24-hour calibration drift limits of, the applicable performance specifications in 40 CFR part 60, Appendix B, are exceeded; and
 - (iv) Instrument span shall be approximately 200 percent of the expected instrument data display output corresponding to the emission standard for the source.
 - (v) The owner or operator of a source subject to this regulation shall install the required continuous monitoring systems such that representative measurements of emissions from the affected facility are obtained. The location of such systems shall be approved by the Administrator.
 - (vi) The owner or operator of any facility subject to the requirements of this regulation shall submit a written report of excess emissions for each calendar quarter and the nature and cause of the excess emissions, if known. The averaging period used for data reporting shall be six minutes. The required report shall include as a minimum:
 - (A) The magnitude in actual percent opacity of all six-minute averages of opacity greater than the applicable opacity standard for each hour of operation of the facility. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four equally spaced, instantaneous opacity measurements per minute. The date and time of the recorded excesses shall be included.

- (B) 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 system repairs or adjustments shall be reported. The Administrator may require proof of continuous monitoring system performance whenever system repairs or adjustments have been made.
- (C) When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be included in the report.
- (D) The owners or operators of affected facilities shall maintain a file of all information reported in the quarterly summaries, and all other data collected either by the continuous monitoring system for a minimum of two years from the date of collection of such data or submission of such summaries.
- (vii) The reporting requirements of paragraph 23(a)(vi)(A) shall not apply during any period of monitoring system malfunction, provided that the source owner or operator shows, to the satisfaction of the Administrator, that the malfunction was unavoidable and is being repaired as expeditiously as practicable.
- (viii) The owner or operator of any source subject to the regulation shall complete the installation and performance tests of the equipment required by this regulation and begin monitoring and recording within 18 months from promulgation of this regulation.
- (b) The requirements for continuous opacity monitors set forth in paragraph 23(a) above shall not apply to an otherwise affected source if such source utilizes a wet type air pollution control device such that the stack gas contains uncombined water vapor. In such cases, the Administrator may require the installation and operation of such alternate particulate emission continuous monitoring systems as he deems appropriate.

APPENDIX C

40 CFR 60 Subpart Y

Subpart Y - Standards of Performance for Coal Preparation Plants

§ 60.250 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]

\S 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 D

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



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.

Naughton Plant	Wyoming	4162
(Plant Name)	(State)	(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."

а	b	С	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
1	Yes		
2	Yes		
3	Yes		
	Yes		
	Yes		
·	Yes		
	Yes		

Naughton Plant Wyoming 4162

Permit Requirements

TEP 3

Read the standard 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 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.

TEP 3, Cont'd. <u>Nitrogen Oxides Requirements</u> 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.

Liability, Cont'd.

tep 3, Jont'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

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 o. 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	***************************************
	Della V	1
Signature	/ Unningham	Date April 12th 2002



United States Environmental Protection Agency Acid Rain Program

OMB No. 2060-0258

Phase II NO_x Compliance Plan

Page 1 of 2

	For more inform	processors	ions and refer to 40 C	CFR 76.9		
STEP 1 Indicate plant name, State, and ORIS code from NADB, if applicable	Plant Name	Naughton I	Plant		WY State	4162 ORIS Code
STEP 2	Identify each Indicate boiler for tangential option selecte	affected Group r type: "CB" for ly fired, "V" for ed for each unit.	1 and Group 2 boile cell burner, "CY" fo vertically fired, and	er using the boiler or cyclone, "DBW" "WB" for wet bot	ID# from NADI for dry botton tom. Indicate t	B, if applicable. n wall-fired, "T" the compliance
	ID# 1	ID# 2	ID# 3	ID#	ID#	ID#
	Type T	Туре Т	Type T	Туре	Туре	Туре
(a) Standard annual average emissi limitation of 0.50 lb/mmBtu (for Pha l dry bottom wall-fired boilers)	on se					
(b) Standard annual average emissi limitation of 0.45 lb/mmBtu (for Pha I tangentially fired boilers)	on se					
(c) EPA-approved early election pla under 40 CFR 76.8 through 12/3//07 (also indicate above emission limit specified in plan)	n					
(d) Standard annual average emissi limitation of 0.46 lb/mmBtu (for Pha ll dry bottom wall-fired boilers)	on se					
(e) Standard annual average emissic limitation of 0.40 lb/mmBtu (for <u>Phas</u> Il tangentially fired boilers)	on se					
(f) Standard annual average emissio limitation of 0.68 lb/mmBtu (for cell burner boilers)	on					
(g) Standard annual average emissic limitation of 0.86 lb/mmBtu (for cyclone boilers)	on .					
(h) Standard annual average emissio limitation of 0.80 lb/mmBtu (for verticallyfired boilers)	on _					
Standard annual average emissio imitation of 0.84 lb/mmBtu (for wet bottom poilers)	n					
j) NO, Averaging Plan (include NO, Averaging form)						
k) Common stack pursuant o 40 CFR 75.17(a)(2)(i)(A) check the standard emission imitation box above for most stringent limitation applicable to any unit utilizing stack)						
I) Common stack pursuant to 40 CF 5.17(a)(2)(l)(B) with NO, Averaging check the NO, Averaging Plan box and include NO, Averaging form)	R					

	Naught	on Plant	WY 41	62	NO _x Com	ppliance - Page 2 Page $\frac{2}{2}$ of $\frac{2}{2}$
	1D# 1	ID# 2 Type T	ID# 3	ID#	ID#	ID#
(m) EPA-approved common stack apportionment method pursu to 40 CFR 75.17 (a)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)	ant					
(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 o 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, Cynningham	
Signature	Blunningham	Data April 12+ 2002



Phase II NO_X Averaging Plan

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

Page 1

Page 1 of 3

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.

			(a) Emission	(b)	(c)
Plant Name	State	ID#	Limitation	ACEL	Annual Heat Input Limit
Dave Johnston	WY	BW43	0.68	0.59	17,861,947
Dave Johnston	WY	BW44	0.40	0.53	37,651,633
Hunter	υτ	3	0.46	0.43	28,584,717
Huntington	UT	2	0.40	0.42	37,695,527
Jim Bridger	wy	BW71	0.45	0.42	38,072,583
Jim Bridger	WY	BW72	0.45	0.40	40,285,426
Jim Bridger	WY	BW73	0.45	0.41	42,447,268
Naughton	WY	1	0.40	0.58	15,982,013
Naughton	WY	2	0.40	0.54	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

0.45 lb/mmBtu

$$\frac{\sum_{i=1}^{n} (R_{Li} \times HI_{i})}{\sum_{i=1}^{n} HI_{i}}$$

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

$$\frac{\sum_{i=1}^{n} [R_{1i} \times HI_{i}]}{\sum_{i=1}^{n} HI_{i}}$$

Where,

Alternative contemporaneous annual emission limitation for unit i, in $R_{\text{L}\,\text{I}}$ Ib/mmBtu, as specified in column (b) of Step 1:

≤

 R_{ι_1} Applicable emission limitation for unit i, in lb/mmBtu, as specified in column (a) of Step 1;

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

Number of units in the averaging plan n

Naughton Plant WY 4162

one or more of these plans is given.

STEP 3

Mark one of the two options and enter dates.

This plan is effective for calendar year 2004 through calendar year 2007
unless notification to terminate the plan is given.
Treat this plan as \square identical plans, each effective for one calendar year for the following
calendar years:,, and unless notification to terminate

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. Gupningham	
	Blell	
Signature	13 Curingham	Date 11/10/03
		rook

(a)

(b)

(c)

STEP 1

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

Naughton WY 3 0.40 0.49 30,352,758 Wyodak WY BW91 0.50 0.33 34,389,091 Carbon UT 1 0.40 0.52 6,123,949 Carbon UT 2 0.40 0.52 9,449,694	Plant Name	State	ID#	Emission Limitation	Alt. Contemp. Emission Limitation	Annual Heat Input Limit
Wyodak WY BW91 0.50 0.33 34,389,091 Carbon UT 1 0.40 0.52 6,123,949 Carbon UT 2 0.40 0.52 9,449,694	Naughton	WY	3	0.40	0.49	30,352,758
Carbon UT 2 0.40 0.52 9,449,694	Wyodak	WY	BW91	0.50	0.33	
	Carbon	UT	1	0.40	0.52	6,123,949
	Carbon	UT	2	0.40	0.52	9,449,694
				-		

		-				
				***************************************		4
				-		

APPENDIX E

FGD Pond Operations and Monitoring Plan (October 2003 revision)

NAUGHTON PLANT

PLANT POLICIES AND	PROCEDURES 1	MANUAT	,	
Scrubber Waste Pond Operations and Monitoring Plan	литн Environmental	class ENV	NO. 15	PAGE 1 of 6
AUTHORIZATION Provisionally authorized by Env. Eng. for immediate implementation pending formal approval process	August, 1999		Oc	tober, 2003
PLANT MANAGER	EFFECTIVE DATE		DEV	IEW DATE

1 PURPOSE

1.1 Naughton Plant is committed to reducing the release of sulfur dioxide from the plant scrubber evaporation ponds by the addition of alkali material to either the ponds or scrubber effluent tank.

Control methodology may be modified in order to adapt to changing physical, chemical and economic conditions, however, the commitment to reduce SO₂ released from either pond is a priority.

1.2 This document formalizes Plant Scrubber Evaporation Pond operations and monitoring efforts into one policy for reference and documentation purposes. Deviations from the provisions of this Plan may result in exposure of employees to health hazards and assessment to the Plant of regulatory penalties.

2 SAFETY AND ENVIRONMENTAL CONSIDERATIONS:

- Employees should have, on their person, respirators with acid gas cartridges when near the scrubber evaporation ponds. Ambient (shoreline) SO₂ levels can be determined with handheld monitoring devices (available from the warehouse), via request to environmental personnel, or on a digital display located on the side of the "BirdAvert" shelter. Naughton safety policies must be adhered to when operating or maintaining any scrubber evaporation pond related equipment and/or working in close proximity to the scrubber evaporation ponds. Employees utilizing boats for pH sampling, waterfowl hazing system maintenance, waterfowl hazing/rescue, etc., must conform to all pertinent State and Corporate safety requirements. No one should engage in activities if conditions constitute a risk to employee health and safety.
- Preparation, submittal of and adherence to this Plan is mandated by Wyoming DEQ, Air Quality Division. This Plan is included as an Appendix to the Naughton Plant Air Quality Operating Permit # 30-121-2; compliance with the provisions of this Plan is enforceable under State statute.

3 TRAINING AND RESPONSIBILITY:

- 3.1 Training on the philosophy, practices and provisions of this procedure is conducted as on-the-job training by each employee's Supervisor. The respective supervisor is responsible for ensuring that each employee is adequately trained, either by the supervisor, or another qualified individual. The supervisor will determine when an employee is able to complete these duties independently.
- 3.2 Scrubber evaporation pond operation, monitoring, corrective action and reporting responsibilities are detailed in Appendix A of this document, "Scrubber Evaporation Pond Operations and Monitoring Plan Responsibility Matrix".

4 GUIDELINES AND PROCEDURES:

PLANT POLICIES AND PROCEDURES MANUAL NO. PAGE Scrubber Waste Pond Operations and Monitoring Environmental **ENV** 15 2 of 6 Plan AUTHORIZATION Provisionally authorized by Env. Eng. for immediate implementation August, 1999 October, 2003 pending formal approval process PLANT MANAGER EFFECTIVE DATE REVIEW DATE

4.1 Normal Operations

Additional amounts of neutralizing reagent (alkali) will be added to the FGD system effluent to maintain an effluent pH of 7 or greater and pond pH above 6. Modeling studies indicate that SO₂ releases, from the ponds, may be limited to the range of 3 to 20 tons per year if a pH of, at least, 7 is maintained in the effluent from the FGD system to the evaporation ponds. The scrubber evaporation pond pH is a reflection of the amount of alkali added to the effluent and indicative of potential offgassing. A scrubber evaporation pond pH < 6 is an indicator of potential SO₂ release.

4.2 Monitoring and Measurement

Operations personnel monitor effluent tank pH on a continuous basis ensuring that a pH of, at least, 7 is maintained. An hourly average pH below 7 will initiate a warning alarm in both the scrubber control room and Plant Operations control room and should trigger appropriate corrective action. Any incident where the hourly average tank effluent pH is below 7 should be reported immediately to the Shift Supervisor on duty and plant environmental personnel.

Effluent tank pH is continuously recorded on an instrument mounted on the scrubber control room console and is also logged to the plant main computer database for storage and retrieval. Instrument Technicians standardize/calibrate the effluent pH monitor at least weekly and ensure the proper functioning of the data-logging instrumentation on a regular basis per PM # N3SO017 and PM # N0SO012 (Appendix C of this document). Shoreline SO₂ monitoring is accomplished through the use of an ambient monitoring instrument located in a shelter situated in an area representative of ambient SO₂ readings.

Plant Instrument Technicians monitor the instrument for proper function on, at least, a weekly basis, perform necessary QA/QC procedures and document all such activities in a dedicated logbook located in the Instrument Shop (PM# N3SO001 and PM#N3SO002). The monitored data is also available via a data acquisition system (DAS) located in the Environmental Engineer's office. The DAS provides alarm capability, should the SO₂ offgassing value exceed 2 ppm (hourly average), as well as various data reduction functions. An alarm signal is also provided to the Plant Control Room (Honeywell data point 1EV101) and will provide notification to Plant Control Room Operators should pond SO₂ exceed the alarm limit (hourly average).

Pond liquid will be sampled and analyzed by Plant Laboratory Technicians for pH, on a weekly basis, during ice-free periods, as an aid in determining offgassing potential. Sampling will be postponed as warranted by safety concerns. Generally, the location for the shoreline pH sampling is the boat ramp on scrubber evaporation pond #2, sampling point 2-1. Scrubber Evaporation Pond #1 will be sampled weekly whenever it contains sufficient liquid to be accurately sampled, normally at sampling point 1-1. Sampling results will be documented via the Scrubber Evaporation Pond #1-2 Weekly pH monitoring form (Appendix B of this document), accessible via the Plant intranet (S:/Shared/Environ/Environmental Forms/FGDpondpH.xls).

NAUGHTON PLANT

PLANT POLICIES AND PROCEDURES MANUAL					
SCRUBBECT Scrubber Waste Pond Operations and Monitoring Plan	AUTH Environmental	CLASS ENV	NO. 15	3 of 6	
AUTHORIZATION Provisionally authorized by Env. Eng. for immediate implementation pending formal approval process	August, 1999		——— Ос	tober, 2003	
PLANT MANAGER	EFFECTIVE DATE		REV	TEW DATE	

If the weekly pond pH sampling results in a pH less than 6, a pond pH profile will be conducted the following week utilizing the plant airboat and encompassing a sampling matrix designed to obtain an indication of overall pH representative of the surface of the pond. Laboratory Technicians will forward a copy of the data sheet, via Plant mail or Email, to environmental personnel and the Operations Superintendent following each sampling event. The Chemical Supervisor will arrange for lab personnel to conduct the weekly and other pH sampling. An example of the pond pH data sheet is located in Appendix B.

4.3 Preventive and Corrective Action

Any valid hourly average evaporation pond SO₂ value in excess of 2 ppm will initiate immediate corrective action and notification to Wyoming DEQ/Air Quality Division within 24 hours. In the event that plant environmental personnel are unavailable, the Shift Supervisor should notify Wyoming DEQ/Air Quality Division (Lander) at (307) 332-6755 or DEQ/AQD (Cheyenne) at (307) 777-7391. DEQ personnel should be notified of the incident and subsequent corrective action implemented

Corrective action may include increasing excess reagent addition to the effluent stream and/or directly to the pond.

Any documented evaporation pond pH value less than 6 will initiate immediate corrective action. Corrective action may include manual reagent addition, increasing effluent flow to the pond, etc. Environmental, operations and lab personnel will coordinate to determine appropriate corrective action.

If effluent tank pH is recorded at a value less than 7, over a valid hourly average, the Shift Supervisor should be notified, prompt corrective action initiated and detailed documentation made in the shift supervisor "Environmental Incident" log and the scrubber logbook. The Shift Supervisor should notify plant environmental personnel, as soon as is practicable, via phone, voice mail, E-mail, etc. so that regulatory documentation and notification can occur, as required.

Any modification to, or deviation from, this Operations and Monitoring Plan will be reported to the Wyoming Air Quality Division, by Plant environmental personnel, as specified in the Naughton Air Quality Operating Permit

Estimated annual pond SO₂ emissions will be reported in the annual Emissions Inventory Report.

4.4 Reporting and Recordkeeping

Any deviations or departure from normal operation should be recorded, by the Shift Supervisor- in the Shift Supervisor's "Environmental Incident" log; by the Scrubber Operator in the scrubber control room log and reported immediately to Plant environmental personnel.

PLANT POLICIES ANI	PROCEDURES I	MANUAL	,	
Scrubber Waste Pond Operations and Monitoring Plan	AUTH Environmental	class ENV	NO. 15	PAGE 4 of 6
AUTHORIZATION Provisionally authorized by Env. Eng. for immediate implementation pending formal approval process PLANT MANAGER	August, 1999		-	tober, 2003

Upon receiving notification of any abnormal situations, equipment malfunctions or deviations from normal operations, Plant environmental personnel will initiate appropriate regulatory reporting as specified in Section 4.3 and in the Air Quality Operating Permit. If environmental personnel are unavailable, the Shift Supervisor will initiate notification as outlined above.

Prompt reporting of non-compliance episodes and immediate initiation of corrective action is essential to the successful implementation of this Plan as well as ensuring compliance with the provisions of the Air Quality Operating Permit and conformance with the ISO14001 Environmental Management System.

All supporting documents shall be retained for a period of 5 years.

5 REFERENCES

- 5.1 Naughton Plant Title V/Section 30 Operating Permit # 30-121-2
- 5.2 Wyoming Air Quality Rules and Regulations
- 5.3 Appendix A- Naughton Scrubber Evaporation Pond Operations/Monitoring Plan-Responsibility Matrix
- 5.4 Appendix B- Naughton Scrubber Evaporation Pond # 1-2 Weekly pH Monitoring Form
- 5.5 Appendix C- Preventive Maintenance Work Orders: # N3SO017, N0SO012, N3SO001, N3SO002

(Appendix A)

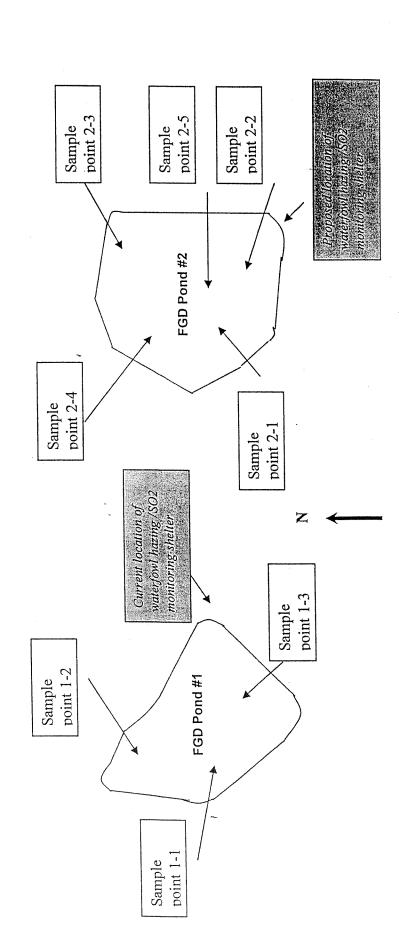
Scrubber Evaporation Pond Operations/Monitoring Plan Responsibility Matrix

Activity	Responsible Personnel	Documentation Maintained By	Corrective Action Implemented By	Corrective Action	Report Deviations/abnormal Conditions to
Maintain FGD effluent pH ≥ 7	Scrubber Operator	Scrubber Operator Shift Supervisor	Scrubber Operator Shift Supervisor	Increase reagent to effluent	Env personnel and Shift Supervisor- DEQ per Oper. Permit
Documentation of abnormal and/or alarm conditions i.e. effluent pH	Scrubber Operator	Scrubber Operator Shift Supervisor	Shift Supervisor	Shift Supervisor to ensure documentation maintained	Env. Personnel and Shift Supervisor- DEQ per Oper. Permit
Maintain pond pH ≥ 6	Shift Supervisor	Lab Technicians Env. Personnel	Shift Supervisor Chemical Supervisor Scrubber Engineer	If < 6 pH, increase reagent to effluent and/or pond.	Env. Personnel and Shift Supervisor- DEQ per Oper. Permit
Weekly pond pH samples	Lab Technician	Lab Technician _,	Chemical Supervisor	Re-schedule sampling ASAP Permit deviation if not completed	Env. Personnel and Shift Supervisor- DEQ per Oper. Permit
Maintain SO ₂ offgassing ≤ 2 ppm	Shift Supervisor	Shift Supervisor Env. Personnel	Shift Supervisor Scrubber Engineer Env. Personnel	If > 2ppm – increase reagent to effluent/pond and/or order shipments of "purge liquor".	Env. personnel or Shift Supervisor- DEQ per Oper. Permit
Maintenance and Operation of SO ₂ Monitoring and FGD effluent pH Instrumentation	Instrument Technicians I&C Supervisor	Instrument Technicians	Instrument Technicians Instrument Supervisor	Immediate corrective action ("E" priority work notification and callout, if necessary)	Env. Personnel and Shift Supervisor- DEQ per Oper. Permit

Any deviations from the parameters established in the Scrubber Evaporation Ponds Operations and Monitoring Plan (pH, offgassing, documentation, etc.) must be immediately reported to Env. Personnel and Shift Supervisor so that regulatory notification and documentation of corrective action can be implemented.

Naughton scrubber evaporation Ponds 1 and 2 Weekly pH Monitoring

	Comments						
FGD Effluent	Hd						
SO ₂ Monitor	ррт						
Sample Point pH (1-1 and 2-1 are normal weekly sample locations)	2-5		-				
location	2-4						
t pH sample	2-3	 					
Point weekly	2-2						
ımple normal	2-1				.,.,	_	
S ₂ 2-1 are	1-3						
1-1 and	1-2						
<u> </u>	1-1						
	Time						
	Date						
	Name	The state of the s		The state of the s			



When printed, this doc tis uncontrolled and for reference only

APPENDIX F

Compliance Assurance Monitoring (CAM) Plan (Amended November 4, 2004)

Compliance Assurance Monitoring Plan: Electrostatic Precipitator for Particulate Matter Control Naughton Plant Electric Utility Steam Generating Unit NADB #1

I. Background

A. Emissions Unit

NADB #1

Description:

Coal-Fired Boiler

Identification:

Source ID #1

Facility:

Naughton Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.:

WAQSR Chapter 3, Section 2

Emission Limits:

Particulate Matter:

0.24 lb/mmBTU of heat input

Monitoring Requirements:

40 CFR 60, Appendix A, Method 5, or an alternate

method approved by the Executive Secretary

(Annual Stack Monitoring)

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
_	Indicator	
	Measurement Approach	Opacity emissions from the boiler exhaust stack are monitored as the indicator of
		particulate emissions compliance.
		Opacity is measured directly by a continuous opacity monitor installed in the
		boller extiaust stack.
;	\$	
<u>:</u>	Indicator Range	An excursion is defined as a 3-hour average opacity value greater than 40%
		opacity. Excursions trigger a precipitator inspection, corrective actions and a
		reporting requirement. Note, the precipitator inspection is used to check pollution
		control equipment performance and can be performed with the precipitator in
		service and operational.

Table B-1 Monitoring Approach (continued)

	Indicator
III. Performance Criteria	
A. Data Representativeness	Opacity is measured in the boiler 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 hours

Monitoring Approach Justification

III. Background

The pollutant-specific emission unit at this source is the Naughton Unit 1 boiler (Source ID #1). The emission source is a coal-fired boiler that is used to generate steam to produce electricity. Flue gas from the combustion process is discharged from the boiler, through an electrostatic precipitator (ESP) 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. An opacity monitor is installed in the Unit 1 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 average opacity value of less-than-or-equal-to 40% opacity. This indicator range was selected following particulate matter testing performed on Naughton Source ID No. 1 and from existing opacity limitation standards.

Particulate matter testing was performed on Source ID #1 on November 13 and 14, 2002 to correlate particulate matter emissions with exhaust stack opacity values. Additionally, data from particulate testing performed on March 29 and 30, 2001 and March 28, 2002 was also utilized to determine the indicator range value.

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

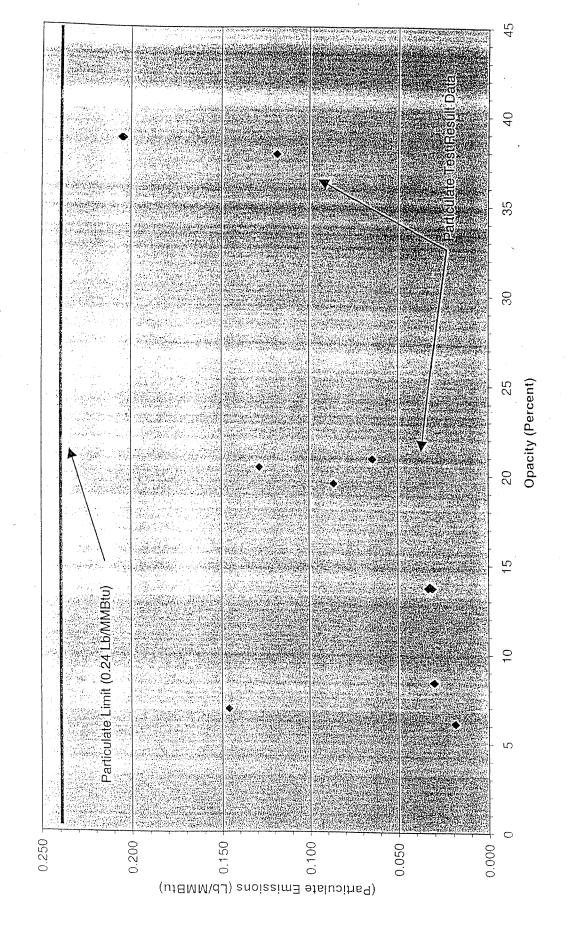
The maximum particulate emission value observed during the testing was 0.205 Lb/MMBtu and occurred on November 14, 2002. The maximum average opacity value observed during the testing was 38.7% and occurred in conjunction with the maximum particulate emission measurement of 0.205 Lb/MMBtu on November 14, 2002. The particulate emission standard for Unit 1 is 0.24 Lb/MMBtu, therefore during the testing the maximum recorded emissions were approximately 85 percent of the standard. As such, particulate testing indicates that emissions are substantially below the 0.23 Lb/MMBtu standard as stack emissions approach 40% opacity.

The following table contains a summary of the particulate test results for Naughton Unit 1 that were used to determine the indicator range value of 40 percent opacity:

	Naughton Unit 1	
Date of Test	Particulate Test Results Lb/MMBtu	Average Opacity Percent
March 29, 2001 – Run 1	0.146	6.9
March 29, 2001 – Run 2	0.030	8.4
March 30, 2001 – Run 3	0.019	6.1
March 28, 2002 – Run 1	0.033	13.7
March 28, 2002 – Run 2	0.031	13.7
March 28, 2002 – Run 3	0.032	13.8
November 13, 2002 – Run 1	0.128	20.4
November 13, 2002 – Run 2	0.064	20.4
November 13, 2002 – Run 3	0.086	19.5
November 14, 2002 – Run 1	0.204	38.7
November 14, 2002 – Run 2	0.118	37.8
November 14, 2002 – Run 3	0.205	38.7

The chart 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.

Naughton Unit 1 CAM Plan Particulate Emissions vs. Opacity



10-23-2001

Compliance Assurance Monitoring Plan: Electrostatic Precipitator for Particulate Matter Control Naughton Plant Electric Utility Steam Generating Unit NADB #2

I. Background

A. Emissions Unit

NADB #2

Description:

Coal-Fired Boiler

Identification:

Source ID #2

Facility:

Naughton Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.:

WAQSR Chapter 3, Section 2

Emission Limits:

Particulate Matter:

0.23 lb/mmBTU of heat input

Monitoring Requirements:

40 CFR 60, Appendix A, Method 5, or an alternate

method approved by the Executive Secretary

(Annual Stack Monitoring)

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		Opacity emissions from the boiler exhaust stack are monitored as the indicator of particulate emissions compliance.	Opacity is measured directly by a continuous opacity monitor installed in the boiler exhaust stack.	An excursion is defined as a 3-hour average opacity value greater than 40% opacity. Excursions trigger a precipitator inspection, corrective actions and a reporting requirement. Note, the precipitator inspection is used to check pollution control equipment performance and can be performed with the precipitator in
	Indicator	Measurement Approach		Indicator Range
	, <u> </u>			—

Table B-2 Monitoring Approach (continued)

	Indicator
III. Performance Criteria	
A. Data Representativeness	Opacity is measured in the boiler 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 hours

Monitoring Approach Justification

III. Background

The pollutant-specific emission unit at this source is the Naughton Unit 2 boiler (Source ID #2). The emission source is a coal-fired boiler that is used to generate steam to produce electricity. Flue gas from the combustion process is discharged from the boiler, through an electrostatic precipitator (ESP) 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. An opacity monitor is installed in the Unit 2 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 average opacity value of less-than-or-equal-to 40% opacity. This indicator range was selected following particulate matter testing performed on Naughton Source ID No. 2 and from existing opacity limitation standards.

Particulate matter testing was performed on Source ID #2 on October 22, 23 and 24, 2002 to correlate particulate matter emissions with exhaust stack opacity values. Additionally, data from particulate testing performed on March 28 and 29, 2001 and March 26, 2002 was also utilized to determine the indicator range value.

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

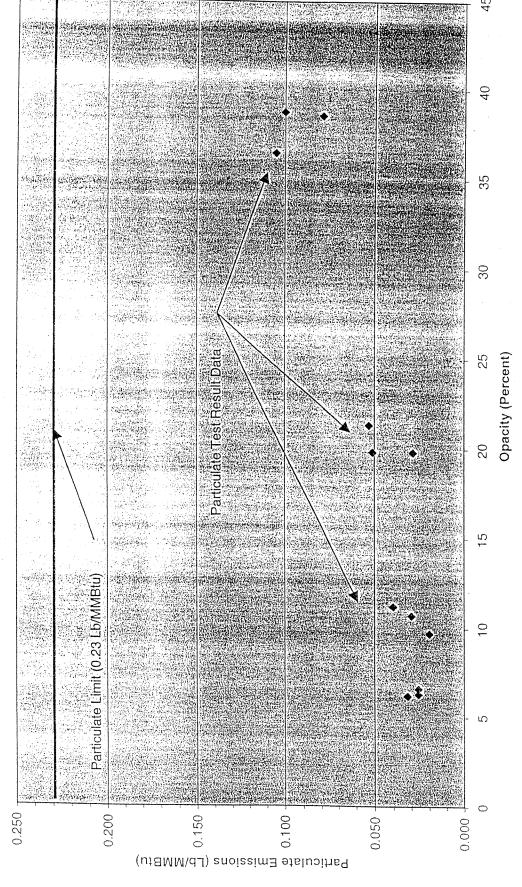
The maximum particulate emission value observed during the testing was 0.105 Lb/MMBtu, with a corresponding opacity value of 36.4%, and occurred on October 24, 2002. The maximum average opacity value observed during the testing was 38.7%, with a corresponding particulate emission value of 0.100 Lb/MMBtu, and occurred during the testing of October 23, 2002. The particulate emission standard for Unit 2 is 0.23 Lb/MMBtu, therefore during the testing the maximum recorded emissions were approximately 46 percent of the standard with a corresponding opacity value of 36.4%. Likewise, at the maximum average opacity value of 38.7%, particulate emissions were approximately 43 percent of the 0.23 Lb/MMBtu standard. As such, particulate testing indicates that emissions are substantially below the 0.23 Lb/MMBtu standard as stack emissions approach 40% opacity.

The following table contains a summary of the particulate test results for Naughton Unit 2 that were used to determine the indicator range value of 40 percent opacity:

	Naughton Unit 2	
Date of Test	Particulate Test Results	Average Opacity
	Lb/MMBtu	Percent
March 28, 2001 – Run 1	0.030	10.7
March 29, 2001 - Run 2	0.020	9.7
March 29, 2001 – Run 3	0.040	11.2
March 26, 2002 - Run 1	0.026	6.6
March 26, 2002 - Run 2	0.032	6.2
March 26, 2002 – Run 3	0.026	6.3
October 22, 2002 – Run 1	0.051	19.8
October 22, 2002 – Run 2	0.053	21.3
October 23, 2002 – Run 3	0.029	19.8
October 23, 2002 – Run 1	0.079	38.5
October 23, 2002 – Run 2	0.100	38.7
October 24, 2002 – Run 3	0.105	36.4

The chart 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.

Naughton Unit 2 CAM Plan Particulate Emissions vs. Opacity



B-24f

Compliance Assurance Monitoring Plan: Electrostatic Precipitator for Particulate Matter Control Naughton Plant Electric Utility Steam Generating Unit NADB #3

I. Background

A. Emissions Unit

NADB #3

Description:

Electric Utility Steam Generating Unit NADB #3

Identification:

Source ID# 3

Facility:

Naughton Plant

B. Applicable Regulation and Emission Limit

Regulation Nos.:

WAQSR Chapter 3, Section 2

Emission Limits:

Particulate Matter:

0.21 lb/MMBtu of heat input

Monitoring Requirements:

40 CFR 60, Appendix A, Method 5, or an alternate

method approved by the Executive Secretary

(Annual stack monitoring)

C. Control Technology

Electrostatic Precipitator (ESP)

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table B-3. Total precipitator power consumption combined with the number of operational ESP transformer-rectifier sets is monitored as the indicators of particulate collection and pollution control equipment performance.

Table L-3 Monitoring Approach

1. Indicator Measurement Approach The total electrostatic precipitator (ESP) power consumption is measured for the Unit No. 3 precipitator as an indicator of particulate emissions compliance. II. Indicator Range An excursion is defined as a 3-hour precipitator power consumption value of less than 124 Kw. Excursions trigger a precipitator inspection, corrective actions and a reporting requirement. Note, the precipitator inspection is used to check pollution control equipment performance and can be performed with the precipitator in service and operational. A. Data Representativeness and operational. B. Verification of Operational Status C. QA/QC Practices and Criteria and equipment inspections of the Unit 3 precipitator power consumption instrumentation and ealibrate as required.	L		Indicator No. 1	Indicator No. 2
Measurement Approach The total electrostatic precipitator (ESP) power consumption is measured for the Unit No. 3 precipitator as an indicator of particulate emissions compliance. II. Indicator Range An excursion is defined as a 3-hour precipitator power consumption value of less than 124 Kw. Excursions trigger a precipitator inspection, corrective actions and a reporting requirement. Note, the precipitator inspection is used to check pollution control equipment performance and can be performed with the precipitator in service and operational. A. Data Representativeness A. Data R	1	I. Indicator		
 II. Indicator Range power consumption is defined as a 3-hour precipitator power consumption value of less than 124 Kw. Excursions trigger a precipitator inspection, corrective actions and a reporting requirement. Note, the precipitator inspection is used to check pollution control equipment performance and can be performed with the precipitator in service and operational. A. Data Representativeness The precipitator power consumption is measured as an indicator of particulate matter collection and equipment performance. B. Verification of Operational Not Applicable Status C. QA/QC Practices and Criteria Perform semi-annual inspections of the Unit 3 precipitator power consumption instrumentation and ealibrate as required. 		Measurement Approach	The total electrostatic precipitator (ESP) power consumption is measured for the Unit No. 3 precipitator as an indicator of particulate emissions compliance.	The number of in-service and operational Unit No. 3 ESP transformer-rectifier (T/R) sets are measured as an indicator of particulate emissions compliance.
 III. Performance Criteria A. Data Representativeness B. Verification of Operational C. QA/QC Practices and Criteria Data Representation instrumentation and calibrate as required. The precipitator power consumption instrumentation and calibrate as required.			An excursion is defined as a 3-hour precipitator power consumption value of less than 124 Kw. Excursions trigger a precipitator inspection, corrective actions and a reporting requirement. Note, the precipitator inspection is used to check pollution control equipment performance and can be performed with the precipitator in service and operational.	An excursion is defined if the 3-hour average number of in-service T/R sets is less than six. Excursions trigger a precipitator inspection, corrective actions and a reporting requirement.
A. Data Representativeness A. Data Representativeness as an indicator of particulate matter collection and equipment performance. B. Verification of Operational Status C. QA/QC Practices and Criteria precipitator power consumption instrumentation and calibrate as required.	<u></u>			
B. Verification of Operational Status C. QA/QC Practices and Criteria precipitator power consumption instrumentation and calibrate as required.		A. Data Representativeness	The precipitator power consumption is measured as an indicator of particulate matter collection and equipment performance.	The number of in-service T/R sets is monitored as an indirect indicator of precipitator power consumption.
C. QA/QC Practices and Criteria Perform semi-annual inspections of the Unit 3 precipitator power consumption instrumentation and calibrate as required.			Not Applicable	Not Applicable
		C. QA/QC Practices and Criteria	Perform semi-annual inspections of the Unit 3 precipitator power consumption instrumentation and calibrate as required.	Maintain the T/R sets per Naughton maintenance plan.

Table B-3 Monitoring Approach (continued)

	Indicator No. 1	Indicator No. 2
III. Performance Criteria (continued)		
D. Monitoring Frequency	The precipitator power consumption is monitored continuously.	The number of in-service precipitator transformer-rectifier (T/R) sets is monitored continuously.
Data Collection Procedures	Precipitator power consumption is monitored and recorded by a data acquisition system.	The number of in-service T/R sets is monitored and recorded by a data acquisition system.
Averaging Period	3 hours	3 hours

Monitoring Approach Justification

III. Background

The pollutant-specific emission unit at this source is the Naughton Unit No. 3 boiler (Source ID #3). Naughton Unit No. 3 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) and into a wet 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.

IV. Rationale for Selection of Performance Indicators

In an electrostatic precipitator (ESP), electric fields are established by applying a direct-current voltage across a pair of electrodes: a discharge electrode and a collection electrode. Particulate matter suspended in the flue gas stream is electrically charged by passing through the electric field around each discharge electrode (the negatively charged electrode). The negatively charged particles then migrate toward the positively charged collection electrodes. The particulate matter is separated from the flue gas stream by retention on the collection electrodes. Particulate matter is removed from the collection plates by periodic rapping of the plates.

As a general rule, ESP performance improves as the total power consumption increases. This relationship is true when particulate matter and flue gas stream properties (such as PM concentration, size distribution, resistivity, and flue gas flow rate) remain stable and all equipment components (such as rappers/hammers, plates, wires, hoppers, and transformer-rectifiers) operate satisfactorily.

The secondary voltage drops when a malfunction, such as grounded electrodes, occurs in the precipitator. When the secondary voltage drops, less particulate matter is charged and collected. Also, the secondary voltage can remain high but fail to perform its function if the collection plates are not cleaned or rapped appropriately. If the collection plates are not cleaned the current draw drops. Thus, since power consumption is the product of voltage and current values, monitoring precipitator power consumption will provide reasonable assurance that the ESP is functioning properly.

Precipitator transformer-rectifier (T/R) sets are used to convert alternating current to direct current. Direct current is used to charge the ESP discharge electrodes and collection electrodes. A minimum number of in-service electrostatic precipitator T/R sets are required to maintain sufficient particulate collection and ensure compliance with the particulate emissions standard.

V. Rationale for Selection of Indicator Ranges

Precipitator power consumption is an indirect indicator of particulate emissions. Continuous ESP power consumption monitoring is utilized as an indicator of particulate matter emissions. In general, a decrease in precipitator power consumption indicates reduces particulate collection.¹

The number of T/R sets in service directly correlates to the power consumption of the ESP under normal operating conditions. A minimum number of in-service T/R sets is used as an indication of compliance with the particulate emissions standard of 0.21 lb/mmBTU heat input.

The indicator ranges for Naughton Unit No. 3 were chosen utilizing a minimum precipitator power consumption value as well as a minimum number of in-service T/R sets. Excursions from the Unit 3 CAM plan occur whenever ESP power consumption falls below 124 Kw or whenever the number of in-service transformer-rectifier sets falls below six operational units. Note; each indicator parameter is based on a three-hour average.

Particulate matter testing was performed on Source ID #3 on October 22 and 23, 2002 to correlate particulate matter emissions with precipitator power consumption as well as the number of in-service transformer-rectifier sets. Additionally, data from particulate testing performed on March 27, 2001 and March 27, 2002 was also utilized in the determination of the indicator range values.

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¹ Precipitator power consumption may decrease at reduced unit load. Therefore, the number of inservice T/R sets is monitored as an additional indicator of pollution control equipment (ESP) performance.

The maximum particulate emission value observed during the testing was 0.126 Lb/MMBtu, with a corresponding precipitator power consumption of 124 Kw, and occurred on October 23, 2002. There were six transformer-rectifier (T/R) sets in operation during the period of maximum particulate emissions. The maximum average precipitator power consumption value observed during the testing was 338 Kw, corresponding to ten T/R sets in service, and a particulate emission value of 0.016 Lb/MMBtu, and occurred during the testing of March 27, 2002. The particulate emission standard for Unit 3 is 0.21 Lb/MMBtu, therefore during the testing the maximum recorded emissions were approximately 60 percent of the standard with a corresponding precipitator power consumption value of 124 Kw. Likewise, at the maximum average precipitator power consumption value of 338 Kw, particulate emissions were approximately 8 percent of the 0.21 Lb/MMBtu standard. The results of the Unit 3 particulate testing indicates that emissions are substantially below the 0.21 Lb/MMBtu standard as precipitator power consumption equals or exceeds 124 Kw or if a minimum of six transformer-rectifier (T/R) sets are in operation.

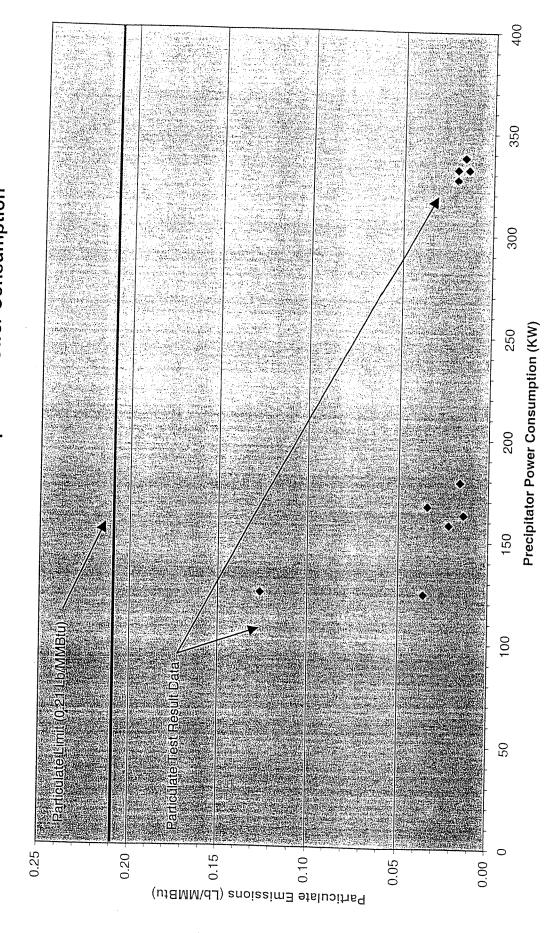
The following table contains a summary of the particulate test results for Naughton Unit 3 that were used to determine the indicator range value of 124 Kw and a minimum number of six in-service transformer-rectifier sets:

Naughton Unit 3					
Date of Test	Particulate Test Results	Precipitator Power	No. of In-service		
	Lb/MMBtu	Consumption (Kw)	T/R Sets		
March 27, 2001 – Run 1	0.020	327	10		
March 27, 2002 – Run 1	0.020	332	10		
March 27, 2002 – Run 2	0.016	338	10		
March 27, 2002 – Run 3	0.014	332	10		
October 22, 2002 – Run 1	0.014	163	8		
October 22, 2002 – Run 2	0.022	158	8		
October 22, 2002 – Run 3	0.034	167	8		
October 23, 2002 – Run 1	0.016	179	6		
October 23, 2002 – Run 2	0.036	124	6		
October 23, 2002 – Run 3	0.126	124	6		

The chart shown on the following page contains the results of the particulate testing with particulate emissions, in units of Lb/MMBtu, graphed against Unit 3 precipitator power consumption values.

The chart shows that the measured particulate emissions were substantially below the 0.21 Lb/MMBtu emission limit and illustrates precipitator power consumption corresponding to measured particulate emissions.

Particulate Emissions vs. Precipitator Power Consumption Naughton Unit 3 CAM Plan



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



I. Background

A. Emissions Unit

Coal Stockpile Reclaim Tunnel

Description:

Fabric Filter Baghouse

Identification:

Source ID #4

Facility:

Naughton Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.:

WAQSR Chapter 3, Section 2

Emission Limits:

Particulate Matter:

2.1 lbs. per hour

(voluntary emission decrease - original limit was 71.2 lb/hr)

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. 4 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 Method 22-like visual observation will be performed daily. The observation will be a minimum of one minute in duration and shall be of sufficient duration to identify any emissions resulting from the automated bag cleaning process.

III. Justification

A. Background

This facility is an electricity-generating power plant. The pollutant-specific emission unit is the Co Stockpile Reclaim Tunnel, emission source ID No. 4. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Naughton Plant. The Coal Stockpile Reclaim Tunnel baghouse filters approximately 15,500 ft³ of air per minute from the coal handling conveying system.

B. Rationale for Selection of Performance Indicator

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

C. Rationale for Selection of Indicator Level

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

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

I. Background

A. Emissions Unit

Unit #2 Coal Bunker Exhauster and Conveyor Gallery Area

Description:

Fabric Filter Baghouse

Identification:

Source ID #5

Facility:

Naughton Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.:

WAQSR Chapter 3, Section 2

Emission Limits:

Particulate Matter:

1.4 lbs. per hour

(voluntary emission decrease – original limit was 66.3 lb/hr)

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. 5 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 Method 22-like visual observation will be performed daily. The observation will be a minimum of one minute in duration and shall be of sufficient duration to identify any emissions resulting from the automated bag cleaning process.

III. Justification

A. Background

This facility is an electricity-generating power plant. The pollutant-specific emission unit is the U #2 Coal Bunker Exhauster and Conveyor Gallery Area, emission source ID No. 5. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Naughton Plant. The Coal Stockpile Reclaim Tunnel baghouse filters approximately 9,900 ft³ of air per minute from the coal handling conveying system.

B. Rationale for Selection of Performance Indicator

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

C. Rationale for Selection of Indicator Level

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

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

I. <u>Background</u>

A. Emissions Unit

Unit #3 Coal Bunker Exhauster and Conveyor Gallery Area

Description:

Fabric Filter Baghouse

Identification:

Source ID #6

Facility:

Naughton Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.:

WAQSR Chapter 3, Section 2

Emission Limits:

Particulate Matter:

0.9 lbs. per hour

(voluntary emission decrease - original limit was 71.2 lb/hr)

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. 6 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 Method 22-like visual observation will be performed daily. The observation will be a minimum of one minute in duration and shall be of sufficient duration to identify any emissions resulting from the automated bag cleaning process.

III. Justification

A. Background

This facility is an electricity-generating power plant. The pollutant-specific emission unit is the U #3 Coal Bunker Exhauster and Conveyor Gallery Area, emission source ID No. 6. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Naughton Plant. The Coal Stockpile Reclaim Tunnel baghouse filters approximately 6,800 ft³ of air per minute from the coal handling conveying system.

B. Rationale for Selection of Performance Indicator

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

C. Rationale for Selection of Indicator Level

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

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

I. Background

A. Emissions Unit

Fly Ash Loadout Silo

Description:

Fabric Filter Baghouse

Identification:

Source ID #8

Facility:

Naughton Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.:

WAQSR Chapter 3, Section 2

Emission Limits:

Particulate Matter:

0.3 lbs. per hour

(voluntary emission decrease – original limit was 26.4 lb/hr)

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. 8 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 Method 22-like visual observation will be performed daily. The observation will be a minimum of one minute in duration and shall be of sufficient duration to identify any emissions resulting from the automated bag cleaning process.

III. Justification

A. Background

This facility is an electricity-generating power plant. The pollutant-specific emission unit is the ! Ash Loadout Silo, emission source ID No. 6. The baghouse is used to reduce fugitive emissions resulting from fly ash handling operations at the Naughton Plant. The Fly Ash Loadout Silo baghouse filters approximately 2,400 ft³ of air per minute from the fly ash loadout system.

B. Rationale for Selection of Performance Indicator

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

C. Rationale for Selection of Indicator Level

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

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

I. Background

A. Emissions Unit

Mine Conveyor Baghouse

Description:

Fabric Filter Baghouse

Identification:

Source ID #19

Facility:

Naughton Plant

B. Applicable Regulation and Emission Limit and Monitoring Requirements

Regulation Nos.:

WAQSR Chapter 3, Section 2

Emission Limits:

Particulate Matter:

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. 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 Method 22-like visual observation will be performed daily. The observation will be a minimum of one minute in duration and shall be of sufficient duration to identify any emissions resulting from the automated bag cleaning process.

III. Justification

A. Background

This facility is an electricity-generating power plant. The pollutant-specific emission unit is Mine Conveyor Baghouse, emission source ID No. 19. The baghouse is used to reduce fugitive emissions resulting from coal handling operations at the Naughton Plant. The Mine Conveyor Baghose filters approximately 9,000 ft³ of air per minute from the coal handling system.

B. Rationale for Selection of Performance Indicator

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

C. Rationale for Selection of Indicator Level

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

APPENDIX 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 WAOSR:
- (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 WAOSR.
- (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 SO₂ per hour, pounds of SO₂ per million British thermal units of fuel input, kilograms of VOC per liter of applied coating solids, or parts per million by volume of SO₂) or as the relationship of uncontrolled to controlled emissions (e.g., percentage capture and destruction efficiency of VOC or percentage reduction of SO₂). 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 onetime 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(e) 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
- (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)(l). 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

(Modified November 29,2005)
April 1, 2002 Temporary Exemption From EPA
March 31, 2003 EPA Notification of New Guidance
July 3, 2003 Renewal Petition for Exemption
January 23, 2004 PacifiCorp Supplemental Data
February 19, 2004 EPA Exemption Approval.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

APR - 1 2002

OFFICE OF AIR AND RADIATION

Mr. Barry Cunningham
Designated Representative
Naughton Unit 3
PacifiCorp
201 South Main Street
Suite 2300
Salt Lake City, UT 84101

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Dear Mr. Cunningham:

This letter supersedes the August 3, 2001 decision by EPA, which denied PacifiCorp's January 22, 2001 request for an exemption for Unit 3 of the Naughton Power Station (Naughton) from the requirements of §75.14(a) of the Acid Rain regulations to install, certify, operate, and maintain a continuous opacity monitoring system (COMS). By this letter, EPA is granting Naughton Unit 3 an exemption — with certain conditions as discussed below — from the requirements of §75.14(a), pursuant to §§75.14(b) and 75.66(a). This letter thereby resolves the pending appeal before EPA's Environmental Appeals Board ("EAB"), In Re PacifiCorp (Appeal No. CAA 01-04), of EPA's August 3, 2001 decision.

Based on discussions with representatives of PacifiCorp, EPA understands that PacifiCorp has agreed not to appeal today's letter to the EAB or to any court and that, no later than seven days after receiving this letter, PacifiCorp will file a motion with the EAB seeking dismissal with prejudice of In Rc PacifiCorp (Appeal No. CAA 01-04).

Background

PacifiCorp's Naughton Unit 3 is a coal-fired boiler equipped with an electrostatic precipitator and a wet flue gas desulfurization system to control emissions of sulfur dioxide ("SO2"). Section 75.14(a) requires the owner or operator of a coal-fired unit to monitor for opacity using a continuous opacity monitoring system. However, §75.14(b) provides that "[i]f the owner or operator can demonstrate that condensed water is present in the exhaust flue gas stream and would impede the accuracy of opacity measurements, then the owner or operator of an affected unit equipped with a wet flue gas pollution control system for SO2 emissions or particulates is exempt from the opacity monitoring requirements of this part." 40 CFR 75.14(b).

The regulatory text of §75.14(b) does not describe the procedures that can be used by an

affected unit to demonstrate eligibility for an exemption from §75.14(a), but EPA's Acid Rain Policy Manual Question 5.6, updated in March 2000, directs the designated representative seeking an exemption to submit a petition that includes "a written statement, certified by the designated representative, that the unit has a wet flue gas pollution control system, and the results of procedures that demonstrate that the stack gas contains liquid water droplets."

This guidance further advises applicants to conduct a determination of moisture content using two procedures in Sections 1.2 and 2.3.5 of EPA Method 4 to demonstrate whether liquid water droplets are present in the gas stream: "(1) the reference method (with impingers) and (2) using either a psychrometric chart or saturation vapor pressure tables with measured stack gas temperature." The guidance states that if the moisture content from procedure (2) for a given time period is significantly less than the moisture content from procedure (1) for the same period, then the stack gas is saturated and assumed to have condensed water present. According to the guidance, "[t]he Director of the Clean Air Markets Division [of EPA] will determine whether the petition meets these requirements, and whether to exempt the unit under §75.14(b) from Part 75 opacity monitoring requirements." The guidance arguably assumes, in effect, that if condensed water is present, this would interfere with the accuracy of COMS measurements.

PacifiCorp's January 22, 2001 petition, supplemented by additional information provided on April 10 and June 4, 2001, provided information on stack water content and temperature, in a form consistent with Acid Rain Policy Manual Question 5.6, in order to demonstrate that condensed water is present in the stack of Unit 3. As stated in EPA's August 3, 2001 decision, based on analysis of this information, EPA believes that, in some circumstances, condensed water can exist in Naughton Unit 3 stack gas.

EPA's August 3, 2001 decision discussed an additional issue, namely a separate demonstration that the existing condensed water droplets would impede the accuracy of COMS measurements. Prior to EPA's August 3, 2001 decision, EPA and PacifiCorp representatives had been unable to reach agreement on the need or procedures for such a separate demonstration. EPA's August 3, 2001 decision denied PacifiCorp's exemption request for Naughton Unit 3 because of, among other things, PacifiCorp's failure to make such a demonstration. The decision also explained that EPA intends to update Acid Rain Policy Manual Question 5.6 to provide guidance on how affected units may make a separate demonstration that condensed water droplets in the flue gas impede the COMS measurement accuracy.

On September 4, 2001, PacifiCorp appealed EPA's August 3, 2001 decision to the EAB. PacifiCorp raised, among other things, the issue of what type of demonstration is necessary to support an exemption request under §§75.14(b) and 75.66(a), in light of EPA's guidance in Acid Rain Policy Manual Question 5.6.

EPA's Revised Determination

After further review of PacifiCorp's exemption request and submitted supplemental information and in consideration of the guidance in Acid Rain Policy Manual Question 5.6, EPA

has decided to grant Naughton Unit 3 an exemption from the requirements of §75.14(a), with certain conditions. There are several factors supporting grant of the exemption in this case. First, PacifiCorp's January 22, 2001 petition and the April 10, 2001 supplemental information show that the procedures followed, and the results provided, by PacifiCorp are consistent with the guidance in the Acid Rain Policy Manual Question 5.6. Second, the results show that condensed water existed in the Naughton Unit 3 stack gas during four out of the five tests performed during April 1999, March 2000, and March 2001 (i.e., during all tests except for the April 6, 1999 tests). EPA finds that these results are sufficient to demonstrate that Naughton Unit 3 has condensed water in the stack. Third, although PacifiCorp did not make a separate demonstration that this condensed water would impede the accuracy of a COMS, the guidance arguably assumes that such a separate demonstration is not necessary. Under these circumstances, EPA believes that the most prudent course at this time is to grant Naughton Unit 3 the exemption for a limited period, with certain conditions, and to proceed to issue updated

As previously stated, EPA intends to update soon the guidance in Acid Rain Policy Manual Question 5.6 in order to further address how the criterion in §75.14(b) concerning interference with COMS measurement accuracy may be demonstrated separately from the demonstration of the existence of condensed water in the stack. In light of EPA's intention to issue revised guidance in the near future, EPA anticipates that today's exemption would be the last exemption granted consistent with the existing guidance.

Term of Exemption

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Because EPA's guidance will soon be updated concerning this issue and in order to provide PacifiCorp an opportunity to make an additional demonstration that EPA intends to discuss in the updated guidance, EPA is conditioning Naughton Unit 3's exemption from §75.14(a) as follows:

- 1. No later than nine months after the date that EPA has notified PacifiCorp that revised guidance has been issued, PacifiCorp may submit a petition for renewal of the exemption from \$75.14(a), pursuant to §§75.14(b) and 75.66(a). At that time, PacifiCorp will have an opportunity to make any additional demonstration discussed by the revised guidance concerning §75.14(b).
- 2. If PacifiCorp does not submit a petition for renewal of the exemption from §75.14(a), pursuant to §§75.14(b) and 75.66(a), within nine months after the date EPA gives notice to PacifiCorp of the issuance of the revised guidance, PacifiCorp will have six months from the end of the initial nine-month submission period to come into compliance with §75.14(a) by installing, certifying, operating and maintaining a COMS.
- 3. If PacifiCorp submits a timely petition for a renewal of the exemption from §75.14(a), pursuant to §§75.14(b) and 75.66(a), but EPA issues a final decision denying the renewal petition, PacifiCorp will have six months from the date EPA gives notice to PacifiCorp of the

final denial of the petition to come into compliance with §75.14(a) by installing, certifying, operating and maintaining a COMS. Notwithstanding the preceding sentence, if PacifiCorp appeals to the Environmental Appeals Board the decision denying the renewal petition, thus rendering it not final, the conditional exemption granted by this letter shall be deemed to expire by its terms three years from the date of this letter.

4. The exemption granted by this letter is effective as of August 3, 2001.

Disposition of Appeal

PacifiCorp has informed EPA that the company will accept an exemption, as described above, and will not appeal today's letter to either the EAB or any court. Moreover, since today's letter supersedes and effectively revokes the August 3, 2001 decision, PacifiCorp has agreed to file, within seven days after receipt of the letter, a motion with the EAB to dismiss In Re PacifiCorp (Appeal No. CAA 01-04) with prejudice. However, nothing in this letter shall be construed to constitute a waiver of any of PacifiCorp's rights to appeal and/or seek a stay from any decision on any future exemption renewal application or to challenge any other final agency

EPA's determination in today's letter relies on the accuracy and completeness of the information in PacifiCorp's January 22, 2001 petition and April 10 and June 4, 2001 supplemental submissions and, except as discussed above, is appealable under part 78 of the Acid Rain regulations. If there are any further questions or concerns about this matter, please contact John Schakenbach of my staff at 202-564-9158 or at schakenbach.john@epa.gov.

Sincerely,

Ling F. teckler, for Brian J. McLean, Director . Clean Air Markets Division

Mike Thrift, OGC (2344-A) cc: Albion Carlson, Region VIII Bob Gill, WDEQ



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

March 31, 2003

OFFICE OF AIR AND RADIATION

Mr. Barry Cunningham
Designated Representative
Naughton Unit 3
PacifiCorp
201 South Main Street
Suite 2300
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Dear Mr. Cunningham:

Attached is the new guidance on petitioning for an exemption under section 75.14(b) of the Acid Rain regulations for a unit from the section 75.14(a) requirement to install a continuous opacity monitoring system (COMS). According to the terms of exemption granted for Naughton Unit 3 in the April 1, 2002 letter to PacifiCorp, within 9 months of the date of this e-mail, PacifiCorp may submit a petition for renewal of the exemption from section 75.14(a) requirements. After comparing the suggestions in the new guidance to the original exemption petition submitted for Naughton Unit 3, EPA suggests that the renewal petition state, and provide supporting information showing, that the Method 4 and moisture content data in the original petition and supplemental data on which the original exemption approval was based were collected under normal load, combustion of normal fuel, common weather conditions, and normal emission control operation. If any of these conditions were not met, EPA suggests that further data collection be undertaken to support renewal of the exemption.

Sincerely,

Reynaldo Forte, Acting Branch Chief

Emissions Monitoring Branch

Enclosure

CC:

Albion Carlson, Region 8
Ron Rutherford, Region 8
Bob Gill, Wyoming DEQ
Dan Olson, Wyoming DEQ
Frank Zampedri, PacifiCorp
Reed Zars, WOC

Topic:

Opacity Monitoring -- Exemption

Question:

For a unit with a wet flue gas pollution control system, §75.14(b) allows an exemption from the requirement of §75.14(a) to install, certify, operate and maintain a continuous opacity monitoring system (COMS), if the owner or operator can "demonstrate that condensed water is present in the exhaust flue gas stream and would impede the accuracy of opacity measurements." What is suggested for such a demonstration?

Answer:

Alternatives for Opacity Monitoring in the Presence of Condensed Water Vapor

Section 75.14(a) requires that a coal- or oil-fired unit install, certify and operate a COMS and that each COMS "meet the design, installation, equipment, and performance specifications in Performance Specification 1 in appendix B to part 60 of this chapter." Part 60, Appendix B, Performance Specification 1, §8.1 allows alternative COMS locations, (e.g., after the electrostatic precipitator (ESP) but before the scrubber), if approved by the Administrator. Thus, if an affected unit has an ESP preceding the scrubber, a source owner or operator could perform the §75.14(a) required opacity monitoring after the ESP and before the scrubber and avoid the potential problem of condensed water and impeding accuracy of the COMS altogether. Furthermore, this approach would be consistent with Part 60 requirements.

Requesting an Exemption under §75.14(b)

However, if an owner or operator wants an exemption from the COMS requirement under §75.14(a), the designated representative should submit a petition under §75.66 for an exemption to the Director of the Clean Air Markets Division (CAMD). We recommend that the petition include: (a) a written statement, certified by the designated representative, that the unit has a wet flue gas pollution control system, and (b) the results of the procedure, described below, demonstrating that the stack gas contains liquid water droplets. The Director of the Clean Air Markets Division would determine whether the petition satisfies the recommended criteria discussed in this guidance or is otherwise acceptable and whether to exempt the unit under §75.14(b) from the COMS requirement of §75.14(a). This guidance is not binding and does not represent EPA's final determination on how any particular demonstration must be made to satisfy §75.14(b). While this guidance does not recommend specific

alternative approaches to demonstrating the presence of condensed water or impeding COMS accuracy, it may be possible to make such showings by methods other than the one described below. Any demonstration that either follows or departs from this guidance will be considered on its own merits.

Demonstration of Presence of Condensed Water

To demonstrate whether liquid water droplets are present in the gas stream, a source owner or operator could perform the procedures described in Sections 4.1, 11.0, and 12.1.7 of EPA Method 4 (see Appendix A-3 to 40 CFR Part 60) to demonstrate that the effluent gas stream is saturated. To be most accurate, these procedures for demonstrating saturation should be performed at sampling points representative of the stack gas stream, and under conditions representative of normal operations (e.g., normal load, normal fuel, common weather conditions, and normal control equipment operation) and at the COMS location or, if no COMS is currently installed, at the location that would meet the requirements of Performance Specification 1 in Appendix B of 40 CFR Part 60, except for measurement location condition (3) in §8.1(2)(i). Under Method 4, applicants make a determination of moisture content for the same time period using two procedures: (1) the reference method (with impingers) specified under Section 11.0 of Method 4 and (2) using a temperature probe along with either a psychrometric chart or saturation vapor pressure tables with measured stack gas temperature as specified under Section 4.1 of Method 4. Section 12.1.7 provides for two calculations of stack gas moisture content, one calculation for each of these two procedures. If the moisture content from procedure (1) is greater than the moisture content from procedure (2) (at an appropriate level of numerical precision), then the stack gas is saturated and is assumed to have condensed water present.

Demonstration of Impeding Accuracy of Opacity Measurements

EPA would generally continue to consider the demonstration of the presence of condensed water, following the above procedure, sufficient to show impedance of accuracy of opacity measurements, unless the circumstances of a particular case indicate additional information is needed. However, EPA may ask for a more conclusive demonstration that moisture actually interferes with opacity measurement. One option is to request a demonstration of how well a COMS in a wet stack correlates with Method 9 readings. In at least one case of which we are aware, demonstration of a good correlation between values from a COMS in a wet stack and Method 9 readings has been provided to the Agency.

In addition, the Agency is awaiting the completion of additional tests relating to the use of wet stack opacity monitoring technology. Should such technology be adequately demonstrated, EPA may determine that the exemption authority of §75.14(b) is of no further utility, and propose to amend or delete §75.14(b) and thereby require the use of wet stack opacity monitoring technology in all wet stack situations.

Non-Part 75 COMS Requirements May Still Apply

EPA notes that, if a unit is exempted from the §75.14(a) COMS requirement through an approved petition under §§75.14(b) and 75.66, a COMS or an alternative may still be required by another federal or State program. For example, §60.47a(a) does not allow a subject source to be exempted from a COMS, except where gaseous fuel is the only fuel combusted or if the Administrator approves (separate from a §75.66 petition) monitoring of alternative parameters because of COMS interferences. In contrast, Part 75 allows a unit to fire oil for up to 15% of its annual heat input and still be considered gas-fired and exempt from the COMS requirement. (Note that in some cases, "the Administrator" refers to the EPA Regional Office and in other cases, where new source performance standards (NSPS) enforcement authority has been delegated, it refers to the State or local agency). The Regional, State, or local office should decide, on a case-by-case basis, whether the information submitted with the application adequately demonstrates that an alternative monitoring approach is justified. To ensure national consistency in such demonstrations, the Regional, State, and local offices should consult with EPA Headquarters.

References:

§ 75.14(b), § 75.66; 40 CFR 60.13(i)(1); 40 CFR Part 60, Appendix A-3, Method 4; 40 CFR Part 60, Appendix B, Performance Specification 1; 40 CFR 60.11; 40 CFR Part 60, Appendix A-4, Method 9.

Key Words: Control devices, Exemptions, Opacity monitoring

History: First published in November 1993, Update #2; revised in March 2000, Update #12; revised in ______, Update #____.





P.O. BOX 191 . KEMMERER, WYOMING 83101

July 3, 2003

Reynaldo Forte, Branch Chief Emissions Monitoring Branch US EPA Clean Air Market Division 633 3rd Street North West Washington, D.C. 20001 (202) 564-2346



Subject:

PacifiCorp, Naughton Power Station, Unit #3 Renewal Petition for Exemption from Continuous Opacity Monitoring Requirements

Dear Mr. Forte:

PacifiCorp has received and reviewed EPA's letter dated March 31, 2003 discussing submission of a renewal petition for the exemption from continuous opacity monitoring requirements for Naughton Unit #3. EPA has suggested that the renewal petition include supporting information demonstrating that the Reference Method 4 and moisture content data, provided by PacifiCorp in the original petition, were collected under normal load, combustion of normal fuel, common weather conditions, and normal emission control operation.

Via this letter, PacifiCorp petitions for renewal of the exemption from the requirements of 40 CFR 75.14(a) with respect to Naughton Unit #3. This renewal petition, dated July 3, 2003, satisfies the 9-month response requirement stated in the April 1, 2002 letter from your office.

The normal unit operating conditions for Naughton Unit #3 have been identified and are presented in the Tables included in this document. The data presented in the original petition was collected during the April, 1999 and March, 2000 stack particulate matter testing. The attached supporting information documents normal operating conditions as follows:

Table 1 - (Normal Unit 3 Load and Emission Control Equipment Operation):

The normal or high load level range as determined by 40 CFR 75-6.5.2.1(b) is 294 - 370 MW (gross). Table 1 shows the unit operating within this range during the respective testing periods.

Historic parametric emission control data equipment (FGD system and Precipitator) was not recorded during the test periods and, as a result, is unavailable. As an alternative to parametric data, stack emissions data is included in Table 1. Emissions were below the associated regulatory limits, which PacifiCorp considers to be corroborative evidence that the FGD system was operating normally during the test periods. Based upon 40 CFR Part 60, Method 19, Equation 19-24 and the coal quality data presented in Table 2, SO₂ emissions without the normal emission controls would have been 1.03 #/MMBtu and 1.12 #/MMBtu for the 1999 and 2000 test periods respectively.

Table 2 - (Combustion of Normal Fuel)

The fuel combusted by Unit 3, during normal operation, is sub-bituminous coal. Table 2 summarizes representative coal quality data (daily averages) for the April, 1999 and March, 2000 test periods as compared to annual averages of the same coal quality parameters (Table 2a).

Table 3 - (Normal Weather Conditions)

Weather conditions can vary quite dramatically in South-West Wyoming making it difficult to define common weather conditions. An average of mean ambient temperatures (°F) recorded during the months of March and April, for the period 1999 to 2003, is considered representative of weather conditions for that time of the year and is presented in Table 3.

Table 1 – Unit 3 Load and Emissions Data

Date	Run #	Time Start/End	Avg. Unit Load (MWg)	Avg. SO2 #/MMBtu	Avg. NOx #/MMBtu	Avg. % CO2
4/6/99	1	09:29 - 10:47	348	0.5	0.53	15
4/6/99	2	11:24 - 12:38	349	0.4	0.53	15
4/6/99	3	13:13 - 14:25	345	0.4	0.50	15

3/11/00	1	08:42 - 09:53	349	0.5	0.32	14
3/11/00	2	10:25 - 11:40	350	0.5	0.35	14
3/11/00	3	12:15 - 13:29	349	0.4	0.35	14

Note: The data provided in Table 1 was recorded at Naughton's certified CEM system DAHS.

Table 2 - Unit 3 Coal Data (Daily Averages)

Date	Tons Burned	% Moisture	% Ash	% Sulfur	Btu/#
4/6/99	3755	20.99	5.34	1.03	9950
3/11/00	3865	21.24	6.40	1.12	9805

Table 2a - Unit 3 Coal Data (Annual Averages)

Year	Tons Burned (Avg./Month)	% Moisture	% Ash	% Sulfur	Btu/#
1999	3243	21.4	5.49	0.99	9794
2000	3547	20.6	5.58	1.11	9871

Table 3 – Average Temperatures at Naughton Plant (Kemmerer, Wyoming)

Month	1999	2000	2001	2002	2003	5-Year
	Avg. Temp	Monthly				
	(*F)	(*F)	(•F)	(•F)	(•F)	Average
March	30.2	29.3	30.3	17.6	30.6	27.6
April	34.0	42.8	39.1	39.2	39.5	38.9

Note: The data provided in Table 3 was recorded at the certified meleorological site located at the Naughton Plant.

The data presented in Tables 1 through 3 satisfies the requirement from EPA to provide supporting information demonstrating that the Method 4 and moisture content data in the original petition were collected under normal load, combustion of normal fuel, common weather conditions, and normal emission control operation. PacifiCorp's Naughton Plant respectfully requests the renewal of the exemption from section 75.14(b) requirements for Naughton Plant Unit 3.

If there are any questions regarding the information for this renewal petition, please contact Jon Tolman, Naughton Plant Environmental Engineer at (307) 828-4264.

Sincerely,

Peter Steinbrenner

Naughton Plant Managing Director, Alternate Designated Representative

Certified Receipt #: 7002086000433293629

cc: M. Jenkins, B. Lawson, F. Zampedri - PacifiCorp

Naughton Staff, K. Edrington, J. Tolman, D. Podlesnik

D. Olson, G. Meeker - Wyo. DEQ/AQD



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NAUGHTON PLANT

P.O. BOX 191 • KEMMERER, WYOMING 83101

January 23, 2004

Mr. Sam Napolitano, Director USEPA Clean Air Markets Division 633 3rd Street, Northwest Washington, D.C. 20001

Subject:

PacifiCorp, Naughton Power Station, Unit #3 Additional Data Request for

the Renewal Petition for Exemption from Continuous Opacity Monitoring

Requirements

Dear Mr. Napolitano:

PacifiCorp's Naughton Plant previously submitted a renewal petition for the exemption from continuous opacity monitoring requirements for Unit #3. On July 3, 2003, Mr. John Schakenbach (U.S. EPA) reviewed the renewal petition and, based on his review, felt additional supplemental data, for the moisture testing that was conducted in March of 2001, was necessary.

On September 8, 2003, the data requested by Mr. Schakenbach was submitted. After prolonged deliberation, Mr. Schakenbach and other EPA personnel determined that, since this petition is the first of its kind, additional supporting data would be necessary. The data requested by Mr. Schakenbach is presented in the tables below.

Please contact Mr. Frank Zampedri at (801) 220-2169 with any questions or for additional information.

Sincerely,

Péter Steinbrenner

Naughton Plant Managing Director, Alternate Designated Representative

Cert. Receipt #:

70022030000762612352

CC:

D. Olson/G. Meeker (Wvo. DEQ/AQD)

M. Jenkins, B. Lawson, F. Zampedri, J. Tolman - (PacifiCorp)

Requested data Table 1:

Provide for each test day in 1999, 2000, and 2001, the average daily ambient temperature.

Table 1 Average Daily Ambient Temperature, ° F

Date	Temperature, °F
4/6/99	34.5
3/11/00	25.2
3/25/01	38.1
3/26/01	35.2
3/29/01	35.4
3/30/01	35.6

Requested data Tables 2a, 2b, and 2c:

Provide the annual daily mean and standard deviation for 1999, 2000, and 2001 for: Tons of coal burned, % Moisture, % Ash, % Sulfur, and Btu/lb.

Table 2a Monthly Average (1999) Naughton Unit 3 Coal Data Monthly Average

	1999						
	Tons Burned	% Moisture	% Ash	% Sulfur	Btu/#		
Jan	82431	21.6	5.1	1.0	9805		
Feb	98287	22.2	5.0	0.9	9740		
Mar	87541	21.2	5.1	1.1	9882		
Apr	58663	21.4	5.4	1.0	9797		
May	Unit No	t Operating – M	lajor Sched	uled Overha	aul		
Jun	53963	21.4	5.2	1.0	9847		
Jul	94907	21.2	5.7	1.0	9770		
Aug	107817	21.2	5.7	0.9	9785		
Sep	109255	21.9	5.1	1.0	9752		
Oct	110038	21.2	6.1	1.0	9733		
Nov	105243	20.9	6.0	1.1	9841		
Dec	106377	21.1	5.8	1.1	9818		

Annual Daily Mean and Standard Deviation 92229 21.4 5.5 1.0 9797

Mean: Std. Dev.: 19930.8 0.4 0.4 0.1 47.3

<u>Table 2b</u>

Monthly Average (2000)

Naughton Unit 3 Coal Data Monthly Average

		2	.000				
	Tons Burned	% Moisture	% Ash	% Sulfur	Btu/#		
Jan	113807	20.6	5.3	1.0	9982		
Feb	105533	20.6	5.6	1.0	9928		
Mar	. 110691	20.7	5.8	1.0	9907		
Apr	98349	20.6	5.3	0.9	9966		
May	110172	21.3	4.9	0.9	9784		
Jun	94366	20.5	5.9	8.0	9780		
Jul	105084	19.5	8.3	0.5	9628		
Aug	112871	20.4	5.5	1.1	9858		
Sep	111843	20.0	4.9	1.5	10099		
Oct	115030	. 20.5	5.6	1.3	9869		
Nov	102195	21.4	4.1	1.6	9905		
Dec	118396	21.3	5.9	1.6	9732		
	Annual Dai	ly Mean and St	andard De	viation	······································		
Mean:	107685	20.6	5.6	1.1	9859		
Std. Dev.:	7308.7	0.6	1.0	0.4	126.4		

<u>Table 2c</u> Monthly Average (2001) Naughton Unit 3 Coal Data Monthly Average

,							
	2001						
	Tons Burned	% Moisture	% Ash	% Sulfur	Btu/#		
Jan	111091	20.9	6.2	1.8	9736		
Feb	105543	21.0	6.6	1.5	9684		
Mar	104631	21.8	5.8	1.4	9612		
Apr	113446	21.7	4.8	1.0	9841		
May	122090	21.0	5.6	1.4	9823		
Jun	106701	20.9	5.8	1.3	9834		
Jul	114013	20.5	5.8	1.4	9879		
Aug	101087	20.6	5.6	1.3	9897		
Sep	111293	20.2	5.4	1.0	9999		
Oct	107843	20.6	5.8	1.4	9857		
Nov	94526	21.0	4.9	1.4	9968		
Dec	121501	20.9	5.2	1.2	9925		
	Annual Dai	ly Mean and St	andard De	viation			
Mean:	109334	20.9	5.6	1.3	9847		
Std. Dev.:	8284.5	0.5	0.5	0.2	114.0		

Requested data Tables 2d, 2e, and 2f:

Provide the daily mean and standard deviation for 1999, 2000, and 2001 for: Tons of coal burned, % Moisture, % Ash, % Sulfur, and Btu/lb.

Table 2d

Daily Mean and Standard Deviation (1999)

Naughton Unit 3 Coal Data - Daily Mean and Standard Deviation									
	1999								
	Tons Burned	% Moisture	% Ash	% Sulfur	Btu/#				
Daily Mean:	3,370.5	21.4	5.5	1.0	9,794.9				
Std. Dev.:	906.0	0.9	0.9	0.2	213.1				

<u>Table 2e</u>
Daily Mean and Standard Deviation (2000)

Naughton Unit 3 Coal Data - Daily Average and Standard Deviation								
2000								
	Tons Burned	% Moisture	% Ash	% Sulfur	Btu/#			
Daily Mean:	3,557.1	20.6	5.6	1.1	9,872.8			
Std. Dev.:	761.1	0.9	1.4	0.4	215.7			

Table 2f
Daily Mean and Standard Deviation (2001)

Naughton Unit 3 Coal - Data Daily Average and Standard Deviation								
2001								
	Tons Burned	% Moisture	% Ash	% Sulfur	Btu/#			
Daily Mean:	3,711.2	20.9	5.6	1.3	9,845.4			
Std. Dev.:	723.6	0.9	. 1.2	0.4	244.6			

Requested data Tables 3, 3a, 3b, and 3c:

Provide relative humidity, and precipitation. In addition, provide the standard deviation of the 5-year monthly mean temperature, relative humidity and precipitation for March and April.

Table 3

Monthly Average for Relative Humidity

Month	1999	2000	2001	2002	2003	5-Year
	Relative	Relative	Relative	Relative	Relative	Monthly
	Humidity,	Humidity,	Humidity,	Humidity,	Humidity,	Average,
	%	%	%	%	%	%
March	73.5	79.1	77.5	80.2	84.2	78.9
April	77.7	61.8	69,9	69,2	67.0	69.1

Data Source:

Naughton Plant certified meteorological site

<u>Table 3a</u>

Monthly Total Precipitation

Month	1999 Precipitation, inches	2000 Precipitation, inches	2001 Precipitation, inches	2002 Precipitation, inches	2003 Precipitation, inches	5-Year Monthly Average
March	0.23	0.36	0.23	0.28	0.89	0.40
April	1.48	0.61	0.60	0.26	0.36	0.66

Data Source:

Naughton Plant certified meteorological site

<u>Table 3b</u>
Standard Deviation of Monthly Mean Temperature

Month	1999 Temperature,°F	2000 Temperature,°F	2001 Temperature,°F	2002 Temperature,°F	2003 Temperature,°F	5-Year Monthly Average
March	42.5	40.6	40.7	43.9	42.5	42.0
April	42.0	42.5	43.2	41.9	42.9	42.5

Data Source:

Naughton Plant certified meteorological site

<u>Table 3c</u>
Standard Deviation of Monthly Relative Humidity

Month	1999 Relative Humidity, %	2000 Relative Humidity, %	2001 Relative Humidity, %	2002 Relative Humidity, %	2003 Relative Humidity, %	5-Year Monthly Average
March	19.86	17.65	19.41	15.13	15.84	17.58
April	23.06	24.36	25.5	23.8	25.64	24.47

Data Source:

Naughton Plant certified meteorological site

<u>Table 3d</u> Standard Deviation of Monthly Mean Precipitation

Month	1999 Precipitation, inches	2000 Precipitation, inches	2001 Precipitation, inches	2002 Precipitation, inches	2003 Precipitation, inches	5-Year Monthly Average
March	0.002888	0.003582	0.002677	0.003240	0.008955	0.004268
April	0.010142	0.004813	0.003930	0.002648	0.007998	0.005906

Data Source:

Naughton Plant certified meteorological site

Requested data for Table 4:

<u>Provide the standard deviation and annual daily mean temperatures for 1999, 2000, and 2001.</u>

Table 4
Standard Deviation of the Annual Temperature and Annual Daily Mean Temperature

	1999	2000	2001
Standard Deviation	10.07	10.97	11.67
Temperature	41.5	41.1	41.0

Table 5
Reference Method 4 Stack Moisture and Antoine's Equation
Moisture Determination

Date	Reference Method 4 Moisture, %	Antoine's Equation Moisture, %
3/29/01	16.3	16.3
3/30/01	16.0	16.0

Table 6
Standard Deviation of the Annual Relative Humidity and Annual Average Relative Humidity

	1999	2000	2001
Annual Average	24.99	26.32	26.85
Standard Deviation	67.10	68.43	66.85

Table 7

Daily Average Relative Humidity

_						
	4/6/99	3/11/00	3/25/01	3/26/01	3/29/01	3/30/01
Daily Average	÷					
Relative Humidity	83.06	88.35	80.75	69.52	65.11	62.55



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 2046

FEB 1 9 2004

AIR AND REDIATION

Mr. Peter Steinbrenner Alternate Designated Representative PacifiCorp Naughton Power Station P.O. Box 191 Kemmerer, WY 83101

Re:

Request for Approval of a Renewal Petition for Exemption from Continuous Opacity Monitoring Requirements for Naughton Power Station, Unit 3 (Facility ID (ORISPL) 4162)

Dear Mr. Steinbrenner:

This is in response to your July 3, 2003 petition and your September 4, 2003, January 8, 2004, and January 22, 2004 petition supplements in which PacifiCorp requested renewal of its exemption from the requirement to install a continuous opacity monitoring system on Unit 3 at the Naughton Power Station. EPA approves the petition, for the reasons discussed below.

Background

PacifiCorp owns and operates the Naughton Power Station in Kemmerer, Wyoming. Unit 3 at the Naughton facility is a coal-fired boiler which is subject to the Acid Rain Program. PacifiCorp is therefore required to monitor and report sulfur dioxide (SO₂), nitrogen oxides, and carbon dioxide emissions from Unit 3 in accordance with 40 CFR Part 75. Part 75 also requires the owner or operator of a coal-fired unit to install and certify a continuous opacity monitoring system (COMS), unless the effluent gas stream is saturated and the owner or operator can demonstrate that the presence of condensed water would impede the accuracy of the opacity measurements (see §§75.14 (a) and (b)).

Since Naughton Unit 3 has a wet flue gas desulfurization (FGD) system to control SO₂ emissions, PacifiCorp believes that the unit qualifies for an exemption from the opacity monitoring requirement under §75.14 (b). Therefore, PacifiCorp submitted a petition to EPA on January 22, 2001, requesting this exemption. The petition included demonstration data to show that the gas stream is saturated. EPA approved the petition on April 1, 2002. According to the terms of the petition approval, if EPA were to issue any new guidance on the implementation of §75.14(b), PacifiCorp would have 9 months from the date of issuance of the guidance to petition the Agency for a renewal of the opacity exemption for Unit 3.

On March 31, 2003, EPA issued a letter to PacifiCorp conveying new policy guidance on

how to qualify for the opacity monitoring exemption under §75.14(b). The new guidance states that the data used to demonstrate that the effluent gas stream is saturated should be collected under conditions representative of normal operations (i.e., normal load, normal fuel, common weather conditions, and normal emission control equipment operation). In response to this new guidance, PacifiCorp submitted a petition for renewal of Naughton Unit 3's opacity exemption on July 3, 2003. At EPA's request, supplementary information was provided on September 4, 2003, January 8, 2004, and January 22, 2004. The renewal petition and the supplementary information purport to establish that the demonstration data upon which EPA's approval of the opacity monitoring exemption was based were collected under normal operating conditions.

EPA's Determination

In its July 3 and September 4, 2003 submittals, PacifiCorp provided both long-term average operating data for Naughton Unit 3 and operating data at the time of the demonstration testing. The load data indicate that Unit 3 was operating at its normal (high) load level during each of the six test periods. PacifiCorp indicated that emission control equipment data were not collected during the test periods. However, SO₂ emission rates indicate that the wet FGD system was operating normally during the test periods.

In its January 8, 2004 and January 22, 2004 submittals, PacifiCorp provided hourly meteorological, e.g., temperature and relative humidity, and daily fuel characteristics, i.e., tons burned, % moisture, % ash, % sulfur, and Btu/#, data and summary statistics for 1999, 2000 and 2001. Because of the way data gaps and instrument error were originally handled, EPA recalculated the daily (for the six test dates) and annual mean and standard deviations of hourly temperature and relative humidity. PacifiCorp provided annual mean and standard deviations of daily fuel characteristics at EPA's request. Generally, a "normal" set of conditions reflects some variation in those conditions. Commonly, it is expected that when samples are taken of occurrences within that "normal" set, approximately 68 percent of sample values are within plus or minus one standard deviation of the sample mean. Using the annual mean ± 1 standard deviation as the determinant of "normal" or common conditions, and applying this metric to the mean daily fuel characteristics, ambient temperatures and relative humidities on the six test dates, one test date, March 11, 2000, meets the new guidance.

Based on the above analysis, EPA has determined that the March 11, 2000 moisture content data upon which the original opacity exemption for Unit 3, in part, is based were collected at conditions of normal operating load, with the normal fuel being combusted, with the emission controls operating properly, and at typical ambient temperatures and relative humidities, and demonstrates the presence of condensed water in the stack. The new guidance for COMS exemption does not specify the amount of data required for a COMS exemption determination to be made. Because at least one set of test data, March 11, 2000, meets the new guidance, EPA approves the petition for renewal of the opacity monitoring exemption under §75.14 (b) for Naughton, Unit 3.

EPA's determination relies on the accuracy and completeness of the information in the July 3, 2003 petition, and the supplementary information provided on September 4, 2003,

January 8, 2004, and January 22, 2004 and is appealable under Part 78 of the Acid Rain regulations. If there are any further questions or concerns about this matter, please contact John Schakenbach of my staff at 202-343-9158 or at (schakenbach.john@epa.gov).

Sincerely,

Sam Napolitano, Acting Director

Clean Air Markets Division

cc: Albion Carlson, Region 8

Ron Rutherford, Region 8
Bob Gill, Wyoming DEQ
Dan Olson, Wyoming DEQ
Frank Zampedri, PacifiCorp

Reed Zars, WOC

bcc: Dwight Alpern

Mike Thrift

APPENDIX I

Fugitive Dust Compliance Plan (Amended August 9, 2004)

PLANT POLICIES AND	PROCEDURES N	IANUAI	J	
Fugitive Dust Compliance Plan	^{AUTH} Environmental	class ENV	NO. 04	PAGE 1 of 9
AUTHORIZATION PROVISIONALLY AUTHORIZED BY ENV. ENG. FOR IMMEDIATE IMPLEMENTATION PENDING FORMAL APPROVAL PROCESS	October, 1996		July 20)04
PLANT MANAGER	EFFECTIVE DATE		REVIEW/R	EVISE DATE

1 PURPOSE:

This document formalizes Plant fugitive dust mitigation efforts into one cohesive policy for reference and documentation purposes and to aid in ensuring compliance with applicable State/Federal regulations. Deviation from the intent and provisions of this Plan may result in violations of regulatory limits and Air Quality Operating Permit provisions with associated penalty assessments as well as exposure of employees to health hazards. Deviation may also result in the initiation of employee disciplinary action.

2 SAFETY AND ENVIRONMENTAL CONSIDERATIONS:

- 2.1 Standard vehicle safety procedures must be observed when using the water truck. Naughton safety policies must be adhered to when operating or maintaining any of the dust suppression related equipment. Dust respirators may be needed during certain dust suppression activities.
- 2.2 Following are areas/activities that have been historically identified with fugitive dust emissions:
 - 2.2.1 Coal pile, coal delivery and other coal pile related operations.
 - 2.2.2 Dry portions of ash ponds/bare earth areas.
 - 2.2.3 Plant roads.
 - 2.2.4 Ash unloading areas.
 - 2.2.5 Landfill operations.
 - 2.2.6 Miscellaneous activities, i.e. construction, hauling, etc.
 - 2.2.7 Pollution control device malfunctions.

Note: Emissions from baghouse vents are considered "point source emissions" and are addressed individually in the Air Quality Operating Permit.

Mitigation efforts for each of these areas are addressed in this document.

2.3 Fugitive dust emissions at Naughton Plant are subject to standards set forth in the Wyoming Air Quality Standards and Regulations (WAQSR) and the Naughton Plant Air Quality Operating Permit.

Fugitive dust emissions are generally quantified in terms of opacity with an opacity limit of 40% (as read by a certified observer) being relevant to all areas of the plant with the exception of the following areas where lower limits apply: fly ash unloading silo area (20%), mine conveyor weigh scale baghouse (<20%), emergency diesel generators and emergency fire pump (30%), and Unit 3 coal conveyor/gallery baghouse (20%). There is also a permit

PLANT POLICIES AND	PROCEDURES N	1ANUAI		
Fugitive Dust Compliance Plan	^{литн} Environmental	class ENV	NO. 04	PAGE 2 of 9
AUTHORIZATION PROVISIONALLY AUTHORIZED BY ENV. ENG. FOR IMMEDIATE IMPLEMENTATION PENDING FORMAL APPROVAL PROCESS	October, 1996		July 2004	
PLANT MANAGER	EFFECTIVE DATE		REVIEW/REVIS	E DATE

requirement to limit fugitive dust emissions from general plant activities to 40% opacity, as determined by a certified observer.

- 2.3 Chapter 2 of the WAQSR details the applicable ambient PM₁₀ (respirable particulate) standards. The applicable PM₁₀ standard (as measured at the monitoring site located east of the north ash pond) is 150 micrograms per cubic meter, averaged over 24 hours, and may not be exceeded more than once per calendar year.
- 2.4 Particulate and meteorological data from the PM₁₀ monitoring site is routed to environmental personnel, where the data is compiled for reporting to regulatory agencies. Particulate (PM₁₀) data is also provided to the control room. This signal (1EV100) alarms when the PM₁₀ level has exceeded 150 microgram per cubic meter for one hour. The one-hour time delay was built in to avoid nuisance alarms during "spiking" episodes.
- 2.5 The Shift Supervisor should be notified whenever the PM₁₀ alarm is activated. Appropriate corrective action, as determined by the Shift Supervisor, should be initiated <u>immediately</u> to avoid an exceedance of the 24-hour standard. As the standard is based upon a 24-hour average, a short-term incident involving a large concentration of dust can cause a violation of the 24-hour average. All corrective action should be thoroughly documented on appropriate log sheets (Shift Supervisor Environmental Incident Log, Control Room Operator Log, etc.). Ambient conditions (wind speed, direction, other mitigating factors, etc.) should be documented as well. If no corrective action is possible or practicable, this should also be documented.

3 TRAINING AND RESPONSIBILITY:

3.1 The Operations Shift Supervisor on duty is responsible for initiation of fugitive dust corrective measures and providing detailed documentation of all exceedances of the PM₁₀ and fugitive dust opacity standards and dust suppression activities to the environmental personnel.

The Operations Superintendent, under the direction of the Plant Manager, is responsible for ensuring that Plant operations are conducted such that fugitive dust emissions are mitigated in a proactive as well as reactive manner. The Maintenance Superintendent is responsible for ensuring that all maintenance activities are conducted in accordance with the provisions of this document and other applicable regulatory requirements. The Plant Manager bears ultimate responsibility for compliance with all regulatory requirements. Plant environmental personnel provide regulatory guidance/oversight and administers the Plant Environmental Management System.

- 3.2 Equipment Operators will operate the water truck as directed by the Shift Supervisor.

 Operations personnel are responsible for the operation of the dust suppression system and water cannons. The water cannon operating procedure can be obtained from the Electricians and/or Operations.
- 3.3 Maintenance personnel will maintain dust suppression related equipment (i.e., water cannons, dust suppression systems, baghouses, etc.) in accordance with the Naughton Air Quality

PLANT POLICIES AND	PROCEDURES N	IANUAL	<u> </u>	
Fugitive Dust Compliance Plan	AUTH Environmental	CLASS ENV	NO. 04	PAGE 3 of 9
AUTHORIZATION PROVISIONALLY AUTHORIZED BY ENV. ENG. FOR IMMEDIATE IMPLEMENTATION PENDING FORMAL APPROVAL PROCESS	October, 1996	96)04
PLANT MANAGER	EFFECTIVE DATE		REVIEW/R	EVISE DATE

Operating Permit and will provide detailed documentation of related maintenance activities to the environmental personnel. Documentation of maintenance activities, equipment malfunctions, etc. is required by the Title V Air Quality Operating Permit. A detailed report documenting compliance or non-compliance with the provisions of this permit is prepared by the Env. Engineer semi-annually and certified as being true and accurate. under penalty of law, by the Plant Manager.

- Various periodic inspections and observations, as required by the Title V Air Quality Operating Permit will be performed under the direction of the environmental personnel.
- 3.5 The Environmental Department is responsible for initiating such activities as sealing of the coal pile and treating the unpaved roads with dust suppressant. The day shift Operations Supervisor is responsible for ensuring that water truck use is properly documented in the appropriate log and ensuring that suitable maintenance of the water truck is performed.
- Training in dust suppression philosophy, practices and the provisions of this procedure are conducted as on-the-job training by each area supervisor and is addressed in the annual Plant Environmental Awareness training. Each employee's respective supervisor is responsible for ensuring that the employee is adequately trained, either by the supervisor or other qualified individual. The supervisor will determine when an employee is able to complete these duties independently, competently and in compliance with applicable regulations.

4 GUIDELINES AND PROCEDURES:

4.1 Normal Operations

Mitigation of fugitive dust emissions and associated corrective action is largely dependent upon the source of the dust. Appropriate and effective mitigation is contingent upon the discretion and judgment of the Shift Supervisor, particularly during low ambient temperature and/or high wind periods. Wind speed and PM₁₀ indication, along with associated alarm points, is provided to the Control Room for assessment of appropriate corrective action. During abnormal (dusty/windy, etc.) conditions, at a minimum, a Plant Operator should be assigned to conduct a survey of coal pile, roads, pond areas, etc. and report back to the Shift Supervisor. The Shift Supervisor will make a determination, based on the information received, regarding appropriate corrective action i.e., water truck, water cannon, termination of coal pile dozer activities/receiving operations, etc. All supporting information must be documented on the Shift Supervisor Environmental Incident Log in the Shift Supervisor's office.

The following sections give general guidelines with respect to the major sources.

4.1.1 Coal Pile

The coal pile is one of the more significant fugitive dust sources and requires a multifaceted approach with regard to mitigation, including water cannons, sealing, and use of water truck and temporary curtailment of coal pile activities, if necessary.

PLANT POLICIES AND PROCEDURES MANUAL								
SUBJECT Fugitive Dust Compliance Plan	^{аитн} Environmental	class ENV	NO. 04	PAGE 4 of 9				
AUTHORIZATION PROVISIONALLY AUTHORIZED BY ENV. ENG. FOR IMMEDIATE IMPLEMENTATION PENDING FORMAL APPROVAL PROCESS	October, 1996		July 2004					
PLANT MANAGER	EFFECTIVE DATE		REVIEW/REVIS	E DATE				

Persons observing fugitive dust emissions from the coal pile should initiate appropriate corrective action. At a minimum, the Shift Supervisor should be notified so that appropriate corrective action can be initiated, documented and reported to regulatory agencies, when necessary. Wyoming DEQ/Air Quality Division has specifically requested that heavy equipment operators operate coal pile equipment at a speed such that dust generated from this activity does not exceed regulatory limits. Depending upon conditions, coal pile activity may need to be reduced or terminated as determined by the Shift Supervisor.

4.1.1.1 Sealants/Suppressants

As the coal pile physical boundary is historically transient in nature, it is impractical to apply other than a periodic dust suppressant/sealant to the portions of the pile that remain relatively undisturbed, i.e. the sides, rear and aprons of the pile.

Either Plant personnel or a contracted applicator, under the direction of environmental personnel, will apply a sealant to these areas when deemed practicable.

Sealed areas should be designated in some manner, under the direction of the day Shift Supervisor, as "Off Limits" and left undisturbed, as much as is practicable, in order to maintain the integrity of the sealed area.

4.1.1.2 Water Cannons

Three stationary water cannons are mounted in positions designed to give coverage of the coal pile during prevailing west-to-east wind events. One cannon is located on the top of the coal stacker arm, another being located on the east end of the concrete dividing wall, and the third mounted on the east side of the transfer building covering the west face of the coal pile. At least one portable, wheel mounted, cannon is also available for use where needed and can be connected via fire hose to the Plant Fire System.

During periods of high wind and/or dusty conditions, ambient temperature permitting, the Control Room Operator may, as directed by the Shift Supervisor, activate the coal pile water cannon system. The water cannons are sequenced through a timed routine to avoid overly saturating any one area of the pile. The water cannons can also be isolated for individual operation. Cannons should remain activated until winds and/or dusty conditions subside as determined by the Shift Supervisor. Shift Supervisors should document all dust suppression activities in the Shift Supervisor Environmental Incident Log located in the control room. The water cannon operating procedure can be obtained from the Electricians and/or Operations.

PLANT POLICIES AND PROCEDURES MANUAL							
SUBJECT Fugitive Dust Compliance Plan	^{дитн} Environmental	class ENV	NO. 04	PAGE 5 of 9			
AUTHORIZATION PROVISIONALLY AUTHORIZED BY ENV. ENG. FOR IMMEDIATE IMPLEMENTATION PENDING FORMAL APPROVAL PROCESS	October, 1996	July 2004					
PLANT MANAGER	EFFECTIVE DATE	REVIEW/REVISE DATE					

4.1.1.3 Surfactants/Wetting Agents

Surfactants/wetting agents are routinely applied to the in-coming coal stream through a system designed for application in the transfer tower. During **normal operation** this system should remain in service except when prohibited by instances or equipment malfunction. Such instances should be reported to the environmental personnel. as required by the Operating Permit.

4.1.1.4 Stacker Chute

Significant fugitive emissions can occur during coal delivery when the stacker chute is elevated from the coal pile proper. During **normal operation**, the chute skirting should be in contact with the pile whenever coal is being delivered.

If fugitive dust emissions from stacker chute operations are observed, the Shift Supervisor or Control Room Operator should be contacted so that corrective action can be initiated. Detailed documentation should be made on the appropriate log sheet(s) and notification made to the environmental personnel, as required by the Operating Permit.

4.1.2 Ash Ponds/Bare Earth Areas

Dry portions of ash ponds and bare earth areas should be reclaimed through applications of cover material, top soil, fertilizer (if warranted) and planting with native, sustainable vegetation. A seed blend designed to supplement wildlife habitat has been developed for Naughton Plant and can be obtained from the environmental personnel.

Those areas where reclamation is not feasible should be kept covered with water or treated with a sealant/surfactant. The south ash pond has three water cannons positioned at the north west to minimize fugitive dust emissions at the ash entrance to the pond. The pump is operated from the ash pond water return building at the south pond. The cannons can be moved as needed to maintain coverage of the open ash area. The Operations Superintendent is responsible for ensuring regulatory compliance in these areas.

Windrowing and piling of ash/dirt should be avoided in order to minimize the number of elevated sources that contribute to windblown particulate.

Fugitive dust emissions from ash ponds and bare earth areas should be documented on the daily Operations Environmental Checklist, Shift Supervisor Environmental Incident Log and reported immediately, to the Shift Supervisor so that corrective action and regulatory reporting can be initiated, as required by the Operating Permit.

PLANT POLICIES AND PROCEDURES MANUAL							
Fugitive Dust Compliance Plan	^{литн} Environmental	class ENV	NO. 04	PAGE 6 of 9			
AUTHORIZATION PROVISIONALLY AUTHORIZED BY ENV. ENG. FOR IMMEDIATE IMPLEMENTATION PENDING FORMAL APPROVAL PROCESS	October, 1996		July 2004				
PLANT MANAGER	EFFECTIVE DATE		REVTEW/REVIS	E DATE			

Corrective action may include, but is not limited to, reclamation, water applications, termination of activities causing fugitive emissions, and application of sealants/suppressants. The Operations Superintendent is responsible for ensuring that Plant operations are conducted such that fugitive dust emissions are mitigated in a proactive as well as reactive manner as required by the Operating Permit.

4.1.3 Plant Roads

Unpaved roads (approximately 8 total miles) will receive an application of a dust suppressant/sealant i.e. magnesium chloride on, at least, an annual basis. Environmental personnel are responsible for arranging with a contractor for the application. Operations will arrange for roads to be prepared by dressing, grading and watering as necessary prior to the application. This activity should be scheduled as early in the year as ambient conditions permit, in order to obtain the maximum benefit from the sealant.

4.1.4 Water Truck

Plant roads will receive a water application with the water truck on an "as-needed" basis, **ambient temperature permitting**. Paved and unpaved roads will be watered as determined necessary by the Shift Supervisor, in order to mitigate dusting. During unusually dusty periods, and in areas where the potential for dusting may be severe, roads will be watered as needed to achieve appropriate dust abatement.

The water truck will be utilized, as necessary, to abate dust emissions on the coal pile, paved/unpaved roads and wherever else practicable. The Shift Supervisor will determine the frequency of, and appropriate areas for, water applications... An alarm will appear on the CRO console (1MC002) when wind speed has been in excess of 20 mph, for 15 minutes as a reminder that dust suppression activities may need to be initiated. The determination of frequency and duration of water truck activities during periods of sustained high wind is at the discretion of the Shift Supervisor. It must be remembered that dust emissions over 40%, in general, constitute an Operating Permit deviation - regardless of the source.

Logs of all water truck related dust suppression activities should be kept in the truck cab. An example log is found in Attachment A. Equipment Operators should document any use of the water truck with respect to dust suppression activities. The Equipment Operator Supervisor (day shift Supervisor) is responsible for ensuring that the provisions of this paragraph are adhered to.

4.1.5 Ash Unloading Operations

Ash unloading activities should be conducted such that emissions from truck beds, silo chutes and vents, etc. are minimal and do not exceed the 20% opacity limit prescribed in the Operating Permit. Loading activities should be moderated or curtailed and truck speeds reduced, as necessary, in order to prevent exceedances of

PLANT POLICIES AND PROCEDURES MANUAL							
SUBJECT Fugitive Dust Compliance Plan	^{литн} Environmental	class ENV	NO. 04	PAGE 7 of 9			
AUTHORIZATION PROVISIONALLY AUTHORIZED BY ENV. ENG. FOR IMMEDIATE IMPLEMENTATION PENDING FORMAL APPROVAL PROCESS	October, 1996	July 2004					
PLANT MANAGER	EFFECTIVE DATE	REVIEW/REVISE DATE					

the emissions standard. Persons observing dust emissions resulting from ash loading activities should notify the Shift Supervisor immediately.

At no time should ash unloading related activities result in emissions exceeding 20% opacity. Provisions of the Naughton Air Quality Operating Permit require that any observed emissions from the ash unloading silo and/or baghouse be reported to the environmental personnel and Shift Supervisor and that corrective action/maintenance be initiated immediately.

Fugitive emissions observed from ash silo operations should be logged (i.e., daily Operations Environmental Checklist, the Shift Supervisor Environmental Incident Log, etc.), reported to the Shift Supervisor and environmental personnel. so that corrective action and regulatory reporting can be initiated. Certain levels of fugitive dust emissions require immediate reporting to regulatory agencies; prompt reporting to environmental personnel is critical to maintaining regulatory compliance.

4.1.6 Landfill Operations

Landfill operations often result in fugitive emissions during hauling, compacting and covering activities. Operators should mitigate emissions by reducing equipment speed, curtailing activities during windy conditions, utilizing the water truck, etc.

4.2 Monitoring and Measurement

Plant operators should document fugitive dust emissions from the coal pile, ash ponds, ash silo area, and other areas of the plant observed during their daily inspections on the Operations Daily Environmental Checklist. Upon observation of emissions/malfunctions, the operator should initiate appropriate notification (Shift Supervisor, environmental personnel. etc.), corrective action (work notifications, etc.) and provide documentation on the Operations Daily Environmental checklist. Shift Supervisors should also provide documentation on the Shift Supervisor Environmental Incident Log.

As all employees share the responsibility for regulatory compliance and procedural conformance, any employee observing fugitive dust emissions or excessive dusting conditions should notify the Shift Supervisor and/or environmental personnel immediately.

Operation and maintenance of the continuous PM₁₀ monitoring system is conducted by the Control Emissions Process Team. System maintenance is detailed in the Environmental Monitoring QA/QC Plan. A PM₁₀ signal (1EV100) is provided to the control room for data and alarming purposes. The Honeywell computer will initiate an alarm when the PM₁₀ value exceeds 150 ug/m³ on an hourly average. Although the applicable regulatory limit is based on a 24- hour average, it is imperative that appropriate corrective action is initiated, and documented, when the hourly average alarms so that the 24-hour average limit is not exceeded. If, during a fugitive dust incident, normal corrective action can not be implemented due to low ambient temperature, equipment malfunction, etc., such information should be documented in detail and provided to environmental personnel.

PLANT POLICIES AND PROCEDURES MANUAL								
SUBJECT	AUTH	CLASS	NO.	PAGE				
Fugitive Dust Compliance Plan	Environmental	ENV	04	8 of 9				
AUTHORIZATION PROVISIONALLY AUTHORIZED BY ENV. ENG. FOR IMMEDIATE IMPLEMENTATION PENDING FORMAL APPROVAL PROCESS	October, 1996		July 2004					
PLANT MANAGER	EFFECTIVE DATE		REVIEW/REVIS	E DATE				

Opacity observations of the coal pile area, ash ponds area, baghouses and ash silo area are conducted, at least weekly, normally by environmental personnel in conjunction with the weekly Naughton Operating Permit inspection and are recorded on the Naughton Operating Permit inspection log.

4.3 Maintenance and Preventive Action

Breakdown/malfunction of any equipment used for fugitive dust suppression or fugitive dust emissions monitoring purposes (water truck, water cannons, dust suppression system, PM₁₀ monitoring system, baghouses, etc.) should initiate immediate corrective action via an emergency work notification and callout, if necessary. Malfunctions warrant regulatory reporting as mandated by the Operating permit. (See Sec. 4.4). All malfunctions must be communicated promptly to environmental personnel so that appropriate documentation/reporting can occur. If environmental personnel can not be reached, notification should be made via phone message, E-mail or other appropriate method.

The Operations day Shift Supervisor should ensure that appropriate preventive maintenance is performed on the water truck, water cannons, dust suppression system, etc. and that malfunctions/breakdowns of such equipment is documented and provided to environmental personnel as required by the Operating Permit.

4.4 Reporting and Recordkeeping

Quarterly PM₁₀ monitoring reports are prepared by environmental personnel and submitted to Wyoming DEQ, Air Quality Division, prior to the end of the first month following the completion of each quarter. The Naughton Air Quality Operating Permit mandates a semi-annual report detailing and certifying compliance with the requirements regarding visual observations, maintenance of dust collection/suppression systems and deviations from the provisions of the Operating Permit. Additionally, annual reporting is provided to the DEQ and EPA wherein the Plant Manager is required to certify compliance or non-compliance with all of the provisions of the Title V Air Quality Operating Permit. Environmental personnel normally prepare and submit these reports.

Prompt reporting of non-compliance episodes and immediate initiation of corrective action is essential to the successful implementation of this Procedure, compliance with the provisions of the Naughton Air Quality Operating Permit and conformance with the ISO14000 EMS. All records will be kept for a minimum of 5 years. Water truck logs to be retained for one year.

5 REFERENCES

- 5.1 Naughton Plant Title V/Section 30 Air Quality Operating Permit
- 5.2 Wyoming Air Quality Rules and Regulations

A schment A

Water Truck Log

(All dust suppression related activities must be logged)

Area Watered/Comments					
Operator					
End					
Start Time					
Date					

When printed, this document is uncontrolled and for reference only