

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. 30-205

Issue Date: **August 11, 2005**
Expiration Date: **August 11, 2010**
Effective Date: **August 11, 2005**
Replaces Permit No.: NA

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,

Black Hills Wyoming, LLC
(Amended November 12, 2009)

Wygen Station I
Section 27, Township 50 North, Range 71 West
Campbell County, Wyoming

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

Dan Olson, Administrator
Air Quality Division

Date

John V. Corra, Director
Department of Environmental Quality

Date

WAQSR CHAPTER 6, SECTION 3 OPERATING PERMIT

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

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GENERAL INFORMATION

(Amended August 30, 2006)

Company Name: **Black Hills Wyoming, LLC** *(Amended November 12, 2009)*

Mailing Address: **P.O. Box 1400**

City: **Rapid City**

State: **South Dakota**

Zip: **57709-1400**

Plant Name: **Wygen Station I**

Plant Location: **Section 27, Township 50 North, Range 71 West, Campbell County, WY (five miles east from Gillette)**

Plant Mailing Address: **13151 Hwy. 51, HCR #81**

City: **Gillette**

State: **Wyoming**

Zip: **82718-9716**

Name of Owner: **Black Hills Wyoming, LLC**
(Amended November 12, 2009)

Phone: **(605) 721-2568**

Designated Representative/

Responsible Official: ***Mark Lux***

Phone: ***(303) 568-3241***

Plant Manager/Contact: **Ron Kocourek**
(Amended December 31, 2007)

Phone: **(307) 682-3771**

DEQ Air Quality Contact: **District Three Engineer**
1866 S. Sheridan Avenue
Sheridan, WY 82801

Phone: **(307) 673-9337**

SIC Code: **4911**

Description of Process: **This is an 80 megawatt pulverized coal fired steam electric power generating facility.**

SOURCE EMISSION POINTS

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

SOURCE ID#	SOURCE DESCRIPTION	SIZE	CH. 6, SEC. 2 PERMITS
1	B&W Pulverized Coal Fired Boiler *	1014 MMBtu (80 MW)	CT-1236A
2	Lime Storage Silo Baghouse	1,650 SCFM	CT-1236A
3	Lime Slaker (3A and 3B) Scrubber	300 SCFM	CT-1236A
4	Recycle Ash Storage Bin Baghouse	238 SCFM	CT-1236A
5	Recycle Ash Mix Tank (5A and 5B) Scrubber	300 SCFM	CT-1236A
6	Waste Ash Silo (Bin Vent Filter) Baghouse	610 SCFM	CT-1236A
7	Waste Ash Silo (7A and 7B) Separator & Baghouse	1,210 SCFM	CT-1236A
None	Unloading Dry Waste & Truck Loading	NA	CT-1236A
None	Haul Road Fugitive Emissions	NA	CT-1236A

* Particulate emissions controlled by a baghouse, SO₂ emissions controlled by a spray dry absorber, and NO_x emissions controlled by selective catalytic reduction and LoNox burners.

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	91
PM ₁₀ Particulate Matter	91
Sulfur Dioxide (SO ₂)	755
Nitrogen Oxides (NO _x)	736
Carbon Monoxide (CO)	666
Volatile Organic Compounds (VOCs)	67
HAZARDOUS AIR POLLUTANT (HAP) EMISSIONS	
OTHER-Sulfuric Acid (H ₂ SO ₄)	8

H₂SO₄ emission estimate based on 5/7/03 stack test results for SO₂ assuming one percent SO₂ converted to SO₃, and 100 percent SO₃ converted to H₂SO₄. Particulate emissions are from permitted limits. All other emission estimates are from the operating permit application.

FACILITY-SPECIFIC PERMIT CONDITIONS

Facility-Wide Permit Conditions

- (F1) **PERMIT SHIELD** [WAQSR Ch 6, Sec 3(k)]
Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance.
- (F2) **ACID RAIN AND TITLE IV ALLOWANCES**
[WAQSR Ch 6, Sec 3(h)(i)(A)(II), Sec 3(h)(i)(D), and W.S. 35-11-212(a)]
 - (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.
 - (b) 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.
- (F3) **SULFUR DIOXIDE EMISSIONS INVENTORY** [WAQSR Ch 14, Sec 3]
The permittee shall comply with the requirements of WAQSR Ch 14, Sec 3. SO₂ emissions shall be estimated in accordance with Ch 14 Sec 3(b), and adjusted in accordance with Ch 14 Sec 3(c) if necessary.

Source-Specific Permit Conditions

- (F4) **VISIBLE EMISSIONS** [WAQSR Ch 3, Sec 2 and Ch 6, Sec 2 Permit CT-1236A]
 - (a) Visible emissions from sources 1 through 7, including the handling collection system, shall not exhibit greater than 20 percent opacity (6-minute average).
 - (b) Visible emissions of any contaminant discharged into the atmosphere from any other single emission source shall not exhibit greater than 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.
- (F5) **FUGITIVE EMISSIONS** [WAQSR Ch 6, Sec 2 Permit CT-1236A]
To eliminate fugitive dust from unloading dry waste from the silo and loading the truck, the permittee will install and maintain a telescoping chute with a recirculation fan pulling air from the area surrounding the discharge chute. This system shall be maintained and operated to minimize any fugitive emissions from the system.
- (F6) **FUGITIVE TRANSPORT EMISSIONS** [WAQSR Ch 6, Sec 2 Permit CT-1236A]
To minimize transport emissions, the waste material will be entirely enclosed in the haul truck. Haul road routes will be treated with suitable chemical dust suppressants in addition to water to control fugitive dust emissions. All treated roads will be maintained on a continuous basis to the extent that the surface treatment remains viable as a control measure.
- (F7) **BOILER EMISSIONS** [WAQSR Ch 6, Sec 2 Permit CT-1236A]
Emissions from the boiler stack (source 1) shall not exceed the limits shown in Table I of this permit.

Table I: Boiler Emissions Limits				
Pollutant		lb/MMBtu or lb/MW-hr	lb/hr	TPY
Particulate		0.02 lb/MMBtu	20.3	89
SO ₂	3-hr block average	0.20 lb/MMBtu	202.8	755
	30 day rolling average	0.17 lb/MMBtu	172.4	
NO _x	30 day rolling average	1.6 lb/MW-hr gross energy output	168.0	736
CO		0.15 lb/MMBtu	152.1	666
VOCs		0.015 lb/MMBtu	15.2	67

- (F8) BAGHOUSE AND SCRUBBER EMISSIONS [WAQSR Ch 6, Sec 2 Permit CT-1236A]
 Particulate emissions from sources 2 through 7 shall not exceed the limits shown in Table II of this permit.

Table II: Particulate Emission Limits				
SOURCE ID#	SOURCE DESCRIPTION	PARTICULATE EMISSION LIMITS		
		gr/dscf	lb/hr	TPY
2	Lime Storage Silo Baghouse	0.01	0.1	0.7
3	Lime Slaker (3A and 3B) Scrubber *	0.01	0.03	0.1
4	Recycle Ash Storage Bin Baghouse	0.01	0.02	0.1
5	Recycle Ash Mix Tank (5A and 5B) Scrubber *	0.01	0.03	0.1
6	Waste Ash Silo (Bin Vent Filter) Baghouse	0.01	0.1	0.2
7	Waste Ash Silo (7A and 7B) Separator & Baghouse *	0.01	0.1	0.5

* Unit has a back-up and only one will be in operation at any given time.

Testing Requirements

- (F9) BOILER EMISSIONS TESTING [W.S. 35-11-110] (Amended 6/21/05)
- (a) The permittee shall measure particulate emissions from the boiler stack (source 1) at least annually for comparison with the emission limits specified in condition F7. Methods specified in 40 CFR 60 Subpart Da, §60.48(a) shall be used to measure particulate emissions.
 - (b) The permittee shall measure CO emissions from the boiler stack at least annually, *beginning the first calendar year following issuance of this permit*, for comparison with the emission limits specified in condition F7. Methods 1-4, or a 40 CFR Part 75 certified flow monitor, shall be used to determine actual flow rate in the stack. Method 10 shall be used to measure CO emissions.
 - (c) Testing shall be conducted in accordance with WAQSR Chapter 5, Section 2(h).
- (F10) ADDITIONAL EMISSIONS TESTING [W.S. 35-11-110]
- (a) The Division reserves the right to require testing as provided under condition G1 of this permit. Should testing be required,
 - (i) For the boiler, visible, particulate, NO_x and SO₂ emissions shall be measured as specified in 40 CFR 60 Subpart Da §60.48a.
 - (ii) For other visible emissions, Method 9 shall be used.
 - (iii) For other particulate emissions, Methods 1-4 and 5 shall be used.
 - (iv) For CO emissions, Methods 1-4 and 10 shall be used.
 - (v) For VOC emissions, Methods 1-4 and 18 shall be used.
 - (vi) For other pollutants, methods approved by the Administrator prior to testing shall be used to measure emissions.
 - (b) Unless otherwise specified, testing shall be conducted in accordance with WAQSR Ch 5, Sec 2(h).

Monitoring Requirements

- (F11) BOILER STACK EMISSIONS MONITORING [WAQSR Ch 6, Sec 3(h)(i)(C)(I)]
- (a) For particulate emissions, the permittee shall perform the testing as required by condition F9(a) at least annually for comparison with the emission limits specified in condition F7.
 - (b) For CO emissions, the permittee shall perform the testing as required by condition F9(b) at least annually for comparison with the emission limits specified in condition F7.
 - (c) Periodic monitoring requirements for opacity, NO_x, and SO₂ emissions from the boiler stack are listed under condition P60-Da3 of this permit.
 - (d) Periodic monitoring for VOC emissions shall consist of reliance on the historical test results provided in Table III of this permit.

- (F12) OTHER VISIBLE EMISSIONS MONITORING [WAQSR Ch 6, Sec 3(h)(i)(C)(I)]
- (a) The permittee shall conduct, at minimum once daily, visual observations of the remaining baghouses and scrubbers (sources 2-7) to determine the presence of visible emissions.
 - (i) The visual observations shall be conducted by a person who is educated on the procedures for determining the presence of visible emissions in accordance with Method 22.
 - (ii) If no visible emissions are observed, compliance with the particulate limit in condition F8 will be assumed.
 - (iii) Observation of any visible emissions shall prompt immediate inspection and, if necessary, corrective actions.
 - (b) The permittee shall conduct quarterly Method 9 observations of fugitive emissions from dry waste unloading to determine compliance with the visible emission limit in condition F4 and the fugitive emission minimization requirement in condition F5.

Recordkeeping Requirements

- (F13) TESTING RECORDS [WAQSR Ch 6, Sec 3(h)(i)(C)(II)]
- (a) For any testing required under conditions F9 or F10, other than Method 9 observations, the permittee shall record, as applicable, the following:
 - (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.
 - (vii) Any corrective actions taken.
 - (b) For any Method 9 observations required by the Division under condition F10, 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 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.
- (F14) VISIBLE EMISSIONS MONITORING RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]
- (a) For the visible emissions monitoring required under condition F12(a), the permittee shall record, as applicable, the following:
 - (i) The date, place, and time of the observation;
 - (ii) The company or entity that performed the observation;
 - (iii) The observation results;
 - (iv) The operating conditions as they existed at the time of the observation; and
 - (v) Any corrective actions taken upon observing visible emissions from the baghouses or upon detecting noncompliance with opacity limitations.
 - (b) 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.
- (F15) BOILER EMISSIONS MONITORING RECORDS [WAQSR Ch 6, Sec 3(h)(i)(C)(II)]
Recordkeeping requirements for the boiler emissions monitoring required under condition F11(c) of this permit are described under condition P60-Da4.
- (F16) FUGITIVE EMISSIONS CONTROL RECORDS [WAQSR Ch 6, Sec 3 (h)(i)(C)(II)]
- (a) The permittee shall record the times during loading and unloading that the telescoping chute required by condition F5 is not operated.
 - (b) For the Method 9 observations required under condition F12(b), the permittee shall keep field records in accordance with Section 2.2 of Method 9 and record any corrective actions taken upon detecting noncompliance with opacity limitations.

- (c) The permittee shall maintain records of water truck operations, water usage, chemical usage, roads watered, roads treated, and any other operational parameters necessary such that compliance with fugitive emissions control requirements specified in condition F6 of this permit can be assessed.
 - (d) The permittee shall retain on-site at the facility all fugitive emissions control records kept in accordance with this condition for a period of at least five years from the date such records are generated.
- (F17) SULFUR DIOXIDE EMISSIONS INVENTORY RECORDS [WAQSR Ch 14, Sec 3(b)]
- (a) The permittee shall maintain all records used in the calculation of SO₂ emissions, including but not limited to the following:
 - (i) Amount of fuel consumed;
 - (ii) Percent sulfur content of fuel and how the content was determined;
 - (iii) Quantity of product produced;
 - (iv) Emissions monitoring data;
 - (v) Operating data; and
 - (vi) How the emissions are calculated, including monitoring/estimation methodology with a demonstration that the selected methodology is acceptable under Ch 14, Sec 3.
 - (b) The permittee shall maintain records of any physical changes to facility operations or equipment, or any other changes (e.g. raw material or feed) that may affect emissions projections of SO₂.
 - (c) The permittee shall retain all records and support information for compliance with this condition and with the reporting requirements of condition F21 at the facility, for a period of **at least ten (10) years** from the date of establishment, or if the record was the basis for an adjustment to the milestone, five years after the date of an implementation plan revision, whichever is longer.

Reporting Requirements

- (F18) TEST REPORTS [WAQSR Ch 6, Sec 3(h)(i)(C)(III)]
- (a) The permittee shall report the results of any emissions tests required under conditions F9 and F10 within 45 days of conducting the tests.
 - (b) The reports shall include the information specified under condition F13 of this permit and shall be submitted to the Division in accordance with condition G4.
- (F19) MONITORING REPORTS [WAQSR Ch 6, Sec 3(h)(i)(C)(III) and Ch 7, Sec 3(i)]
- (a) The permittee shall report to the Division by January 31 and July 31 each year summary results of the visible emissions monitoring required under condition F12. Only monitoring during which visible emissions are observed and any corrective actions taken upon observing visible emissions shall be included in the report. If no visible emissions are observed during the reporting period, this shall be stated in the report.
 - (b) Reporting requirements for the boiler emissions monitoring required under condition F11(c) of this permit are described under condition P60-Da5.
 - (c) All instances of deviations from the conditions of this permit must be clearly identified in each report.
 - (d) The reports shall be submitted to the Division in accordance with condition G4 of this permit.
- (F20) FUGITIVE EMISSIONS CONTROL REPORTS [WAQSR Ch 6, Sec 3 (h)(i)(C)(III)]
- (a) The permittee shall submit to the Division, in accordance with condition G4 of this permit, by January 31 and July 31 each year a summary report on:
 - (i) The times during unloading dry waste from the silo and loading the truck that the telescoping chute system is not operated; and
 - (ii) Results of the visible emissions monitoring required under condition F12(b) of this permit; each opacity measurement and any corrective actions taken upon detecting noncompliance with opacity limitations shall be included in the report.
 - (b) The permittee shall submit to the Division, in accordance with condition G4 of this permit, by January 31 each year an annual summary report on the dust control measures applied to the haul roads.

- (c) The reports shall be based on the fugitive emissions control records kept in accordance with condition F16.
- (F21) SULFUR DIOXIDE EMISSIONS INVENTORY REPORTS [WAQSR Ch 14, Sec 3(b) and (c)]
- (a) The permittee shall report calendar year SO₂ emissions by April 15th of the following year. The inventory shall be submitted in the format specified by the Division.
 - (b) Emissions from startup, shutdown, and upset conditions shall be included in the inventory.
 - (c) If the permittee uses a different emission monitoring or calculation method than was used to report SO₂ emissions in 1998, the permittee shall adjust reported SO₂ emissions to be comparable to the emission monitoring or calculation method that was used in 1998. The calculations that are used to make this adjustment shall be included with the annual emission report.
 - (d) For acid rain sources, the permittee shall submit a summary report of annual SO₂ emissions that were reported to the EPA under 40 CFR Part 75.
 - (e) The permittee shall use 40 CFR Part 75 methodology for reporting emissions for all sources subject to the federal acid rain program.
 - (f) If 40 CFR Part 60, Appendix A, Test Methods 2F, 2G, or 2H are used to measure stack flow rate, the permittee shall adjust reported SO₂ emissions to ensure they are comparable to 1999 emissions. The adjustment may be calculated using the methods in Ch 14 Sec 3(c)(i)(A) through (C). The calculations that are used to make this adjustment shall be included with the annual emission report.
 - (g) The annual reports shall be submitted in accordance with condition G4 of this permit.
- (F22) REPORTING EXCESS EMISSIONS & DEVIATIONS FROM PERMIT REQUIREMENTS [WAQSR Ch 6, Sec 3(h)(i)(C)(III)]
- (a) Reporting requirements for excess opacity, NO_x, and SO₂ emissions from the boiler stack are described under condition P60-Da4 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 of this permit.
 - (c) Emissions which exceed the limits specified in this permit and which are not reported under a different condition of this permit shall be reported annually with the emission inventory unless specifically superseded by condition G17, condition 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.

WAQSR CHAPTER 5, SECTION 2 NEW SOURCE PERFORMANCE STANDARDS (NSPS)
40 CFR 60 SUBPART Da REQUIREMENTS
(Subpart Da is provided in Appendix A)

(P60-Da1) EMISSION LIMITATIONS AND STANDARDS

[WAQSR Ch 5 Sec 2 and 40 CFR 60 Subpart Da §§60.40a, 60.42a, 60.43a, 60.44a, and 60.46a]

The permittee shall meet all requirements of WAQSR Ch 5 Sec 2 and 40 CFR 60 Subpart Da as they apply to the B&W Pulverized Coal Fired Boiler (source 1).

- (a) For emission limits specified elsewhere in this permit which are more stringent than the standards specified under Subpart Da:
 - (i) Compliance with the opacity limit specified in condition F4(a) of this permit is considered compliance with the opacity standard under §60.42a(b).
 - (ii) Compliance with the lb/MMBtu particulate emission limit specified in condition F7 of this permit is considered compliance with the lb/MMBtu standard for particulate matter under §60.42a(a).
 - (iii) Compliance with the 30-day rolling average lb/MMBtu SO₂ emission limit specified in condition F7 of this permit is considered compliance with the lb/MMBtu standard for SO₂ under §60.43a.
 - (iv) Compliance with the lb/Mw-hr gross energy output NO_x emission limit specified in condition F7 of this permit is considered compliance with the applicable standard for NO_x under §60.44a(d).
- (b) Emissions of SO₂ from combusting solid fuel in the boiler shall not exceed 30 percent of the potential combustion concentration (70% reduction).
- (c) The opacity, particulate matter, and NO_x emission standards in Subpart Da apply at all times except during periods of startup, shutdown, and malfunction. The SO₂ emission standards in Subpart Da apply at all times except during periods of startup, shutdown, or when emergency conditions exist and the procedures under §60.46a(d) are implemented.

(P60-Da2) 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 boiler (source 1), including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

(P60-Da3) MONITORING AND COMPLIANCE PROVISIONS [WAQSR Ch 5, Sec 2(j); Ch 6 Sec 2 Permit CT-1236A; and 40 CFR 60 Subpart Da §§60.46a and 60.47a]

- (a) The permittee shall calibrate, maintain, and operate a continuous monitoring system, and record the output of that system, for measuring the opacity of emissions discharged to the atmosphere.
- (b) The permittee shall calibrate, maintain, and operate a continuous emission monitoring system (CEMS), and record the output of that system, for measuring the SO₂ emissions discharged to the atmosphere. SO₂ emissions shall be monitored at both the inlet and outlet of the SO₂ control device.
- (c) The permittee shall calibrate, maintain, and operate a CEMS, and record the output of that system, for measuring the NO_x emissions discharged to the atmosphere. If the permittee has installed a NO_x CEMS to meet the requirements 40 CFR Part 75 and is continuing to meet the ongoing requirements of 40 CFR Part 75, that CEMS may be used to meet the requirements of Subpart Da, except that the permittee shall also meet the reporting requirements of condition P60-Da5 of this permit. Data reported to meet the requirements of condition P60-Da5 shall not include data substituted using the missing data procedures in Subpart D of Part 75, nor shall the data have been bias adjusted according to the procedures of Part 75.
- (d) The permittee shall calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the oxygen or carbon dioxide content of the flue gases at each location where SO₂ or NO_x emissions are monitored.
- (e) The permittee shall calibrate, maintain, and operate a wattmeter on the boiler to measure gross electrical output in megawatt-hour on a continuous basis; and record the output of the monitor.
- (f) The permittee shall certify, operate, and maintain a continuous flow monitoring system meeting the requirements of Performance Specification 6 of Appendix B and procedure 1 of Appendix F of 40 CFR Part 60, and record the output of the system, for measuring the flow of exhaust gases discharged to the atmosphere. Alternatively, data from a continuous flow monitoring system certified according to the requirements of 40 CFR 75.20, meeting the applicable quality control and quality assurance requirements of 40 CFR 75.21, and validated according to 40 CFR 75.23, may be used.

- (g) All continuous monitoring systems (CMS) shall comply with 40 CFR Part 60 Appendix F. Data accuracy assessment for the purpose of maintenance and operation of the CEMS shall consist of one cylinder gas audit per calendar quarter for three quarters of each operating year and one relative accuracy test audit per operating year. Performance evaluations shall be conducted in accordance with §60.47a(i) and the applicable performance specification in 40 CFR Part 60 Appendix B as follows:
 - (i) COMS shall comply with all the provisions and requirements in Performance Specification 1.
 - (ii) CEMS for measuring NO_x or SO₂ emissions shall comply with Performance Specification 2.
 - (iii) CEMS for measuring the O₂ or CO content of effluent gases shall comply with Performance Specification 3.
 - (iv) Additionally, the NO_x and SO₂ CEMS shall demonstrate linearity and be certified in concentration (ppm), lb/MW-hr for NO_x, lb/MMBtu for SO₂, and lb/hr for NO_x and outlet SO₂.
 - (v) For the COMS and CEMS, the permittee shall follow the most recently approved "Quality Assurance Plan" approved by the Division.
- (h) For each CEMS and COMS performance evaluation, the permittee shall follow the procedures in §60.47a(i) or (j) and WAQSR Ch 5 Sec 2(j)(iv).
- (i) The CMS shall be operated and data recorded during all periods of operation of the boiler, including periods of startup, shutdown, and malfunction or emergency conditions, except for CMS breakdowns, repairs, calibration checks, and zero and span adjustments, and shall meet the following:
 - (i) All COMS 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. The permittee shall reduce all COMS data to six minute averages. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each six-minute period.
 - (ii) All other CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. The permittee shall reduce all data from CEMS to one-hour averages, expressed in lb/MMBtu. One-hour averages shall be computed from four or more data points equally spaced over each one-hour period. At least two data points must be used to calculate the 1-hour averages.
 - (iii) Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used.
- (j) For the sulfur dioxide, nitrogen oxides, and oxygen or carbon dioxide monitoring systems:
 - (i) The permittee shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days.
 - (ii) If this minimum data requirement cannot be met with a CMS, the permittee shall supplement emission data with the reference methods and procedures described in §60.47a(h).
- (k) For opacity, compliance shall be determined by the monitoring data from the COMS required by this condition. The monitoring data will constitute prima facie evidence that emissions (6-minute average) in excess of the limit in condition F4 are a violation of this permit.
- (l) For SO₂ emissions, compliance shall be determined by the monitoring data from the CMS required by this condition. The monitoring data will constitute prima facie evidence that emissions in excess of the following are a violation of this permit:
 - (i) Any calculated arithmetic average of all hourly emission rates for SO₂ for 30 successive boiler operating days, except for data obtained during startup, shutdown, or emergency conditions, that exceeds the lb/MMBtu or lb/hr limits in condition F7 of this permit. At the end of each boiler operating day, the 30-day rolling average emission rate shall be calculated and compliance determined.
 - (ii) Any calculated 3-hour block average SO₂ emission rate that exceeds the lb/MMBtu or lb/hr limits in condition F7 of this permit. The 3-hour block average emission rate shall be determined at the end of each 3-hour operating period, and be calculated as the arithmetic average of the SO₂ stack emission rates for the previous three boiler operating hours.
- (m) Additionally, the permittee shall identify any calculated percent SO₂ reduction, based on the average inlet and average outlet SO₂ emission rates for the 30 successive boiler operating days, that exceeds the emission reduction requirement in condition P60-Da1(b). At the end of each boiler operating day, the 30-day rolling average percent emission reduction shall be calculated and compliance determined.

- (n) For NO_x emissions, compliance shall be determined by the monitoring data from the CMS required by this condition. The monitoring data will constitute prima facie evidence that emissions in excess of the following are a violation of this permit:
 - (i) Any calculated arithmetic average of all hourly lb/hr emission rates for NO_x for 30 successive boiler operating days, except for data obtained during startup, shutdown, or malfunction conditions, that exceeds the lb/hr limit in condition F7 of this permit. At the end of each boiler operating day, the 30-day rolling average emission rate shall be calculated and compliance determined.
 - (ii) Any calculated arithmetic average of all hourly lb/Mw-hr emission rates for NO_x for 30 successive boiler operating days, except for data obtained during startup, shutdown, or malfunction conditions, that exceeds the lb/Mw-hr limit in condition F7 of this permit. The hourly lb/Mw-hr emission rate is determined by multiplying the average hourly NO_x output concentration, measured as required by (c) above, by the average hourly flow rate, measured as required by (f) above, and divided by the average hourly gross energy output, measured as required by (e) above. At the end of each boiler operating day, the 30-day rolling average emission rate shall be calculated and compliance determined.
- (o) The permittee may request approval from the Division for alternatives to the monitoring requirements in this condition in accordance with Ch 5 Sec 2(j)(ix) and (x) of WAQSR.

(P60-Da4) RECORDKEEPING [WAQSR Ch 5, Sec 2(g)(ii) and (g)(v); Ch 6 Sec 2 Permit CT-1236A; and Ch 6, Sec 3(h)(i)(C)(II)]

- (a) The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the boiler (source 1); any malfunction of the air pollution control equipment; or any periods during which a CMS or monitoring device is inoperative.
- (b) The permittee shall maintain records of all measurements, including CMS, monitoring device, and performance testing measurements; all CMS performance evaluations; all CMS or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices.
- (c) For SO₂ emissions, the permittee shall maintain records of the following calculated as described in condition P60-Da3(l) and (m):
 - (i) Each 30-day rolling average SO₂ emission rate in lb/MMBtu and lb/hr, and each 30-day rolling average SO₂ inlet level in lb/MMBtu, calculated each day;
 - (ii) Each 30-day rolling average percent SO₂ emission reduction, calculated each day; and
 - (iii) Each 3-hour block average SO₂ emission rate in lb/MMBtu and lb/hr.
- (d) For NO_x emissions, the permittee shall maintain records of each 30-day rolling average NO_x emission rate in lb/hr and lb/Mw-hr, calculated each day as described in condition P60-Da(n).
- (e) The records required by 40 CFR Part 75 Subpart F may be used to comply with the requirements of this condition. Any information required by paragraphs (a) through (d) above which is not included in Subpart F records must also be recorded.
- (f) All information required by the P60 conditions of this permit shall be maintained 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-Da5) REPORTING [WAQSR Ch 5, Sec 2(g)(iii) and (j)(viii); Ch 6 Sec 2 Permit CT-1236A; and 40 CFR 60 Subpart Da §60.49a]

- (a) The permittee shall submit a Subpart Da emissions and monitoring systems performance report to the Division quarterly. The report shall be postmarked by the 30th day following the end of each calendar quarter. Written reports shall be in a format approved by the Division and shall include the following information:
 - (i) The results of the quarterly audits required by condition P60-Da3(g).
 - (ii) For SO₂ and NO_x, emissions, the following for each 24-hour period:
 - (A) Calendar date;
 - (B) The average emission rates (lb/MMBtu and lb/hr for SO₂; lb/hr and lb/Mw-hr for NO_x) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter;

- reasons for non-compliance with the emission standards; and, description of corrective actions taken.
- (C) The average SO₂ emission levels (in lb/MMBtu) as measured at the inlet to the SO₂ control equipment for each 30 successive boiler operating days, ending with the last 30-day period in the quarter.
 - (D) Percent reduction of the potential combustion concentration of SO₂ for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken.
 - (E) The additional information listed in §60.49a(b).
 - (F) If the minimum quantity of emission data as required by condition P60-Da3(j)(i) of this permit is not obtained for any 30 successive boiler operating days, the information described in §60.49a(c) shall also be included.
- (iii) For the three-hour block SO₂ emissions limit:
 - (A) The magnitude of excess emissions computed in accordance with condition P60-Da3, any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
 - (B) Periods of excess emissions, for purposes of this section (iii), are defined as all three-hour block periods during which the average SO₂ emissions exceed the lb/MMBtu or lb/hr three-hour block average standards in condition F7.
 - (iv) If the SO₂ emission standards in P60-Da1 are exceeded during emergency conditions because of control system malfunction, the permittee shall submit a signed statement in accordance with §60.49a(d).
 - (v) The magnitude of excess opacity computed in accordance with condition P60-Da3, any conversion factors used, and the date and time of commencement and completion of each time period of excess opacity. Periods of excess opacity are defined as all six minute periods during which the average opacity from the boiler exceeds the standard in condition F4.
 - (vi) For any periods for which opacity, SO₂, or NO_x emissions data are not available, the permittee shall submit a signed statement in accordance with §60.49a(f).
 - (vii) A statement in accordance with §60.49a(g).
 - (viii) The boiler operating time during the reporting period.
 - (ix) Specific identification of each period of excess emissions that occurred during start-ups, shutdowns, or malfunctions of the boiler. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
 - (x) The date and time identifying each period during which a CMS was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - (xi) When no excess emissions have occurred or none of the CMS have been inoperative, repaired, or adjusted, such information shall be stated in the report.
- (b) The quarterly report shall be submitted to the Division in accordance with condition G4 of this permit.

COMPLIANCE CERTIFICATION AND SCHEDULE

Compliance Certification [WAQSR Ch 6, Sec 3(h)(iii)(E)]

- (C1) (a) The permittee shall submit by January 31 each year a certification addressing compliance with the requirements of this permit. The certification shall be submitted as a stand-alone document separate from any monitoring reports required under this permit.
- (b) (i) For the sulfur dioxide emissions inventory, the permittee shall assess compliance with condition F3 by reviewing records kept in accordance with condition F17 and verifying reports were submitted in accordance with condition F21.
- (ii) For visible emissions from the boiler stack (source 1), the permittee shall assess compliance with conditions F4(a) and P60-Da1 by conducting the monitoring required by condition P60-Da3.
- (iii) For visible and particulate emissions from the remaining baghouses and scrubbers (sources 2-7), the permittee shall assess compliance with conditions F4(a) and F8 by conducting the monitoring required by condition F12.
- (iv) For truck loading and transport fugitive emissions control, the permittee shall assess compliance with conditions F4, F5, and F6 by conducting the monitoring required by condition F12 and reviewing the records kept in accordance with condition F16.
- (v) For particulate emissions from the boiler stack, the permittee shall assess compliance with condition F7 by conducting the monitoring required by condition F11.
- (vi) For SO₂ and NO_x emissions from the boiler stack, the permittee shall assess compliance with conditions F7 and P60-Da1 by conducting the monitoring required by condition P60-Da3.
- (vii) For CO emissions from the boiler stack, the permittee shall assess compliance with condition F7 by conducting the testing required by condition F9.
- (viii) For VOC emissions from the boiler stack, the permittee shall assess compliance with condition F7 by relying on the performance test results in Table III.
- (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) and (D)]

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

TABLE III: BOILER STACK VOC PERFORMANCE TEST RESULTS					
Pollutant	Emission Limit (lb/MMBtu)	Tested Emissions (lb/MMBtu)	Emission Limit (lb/hr)	Tested Emissions (lb/hr)	Test Date
VOCs*	0.015	0.002	15.2	2.2	May 7, 2003

* VOCs were tested using EPA Method 25A.

GENERAL PERMIT CONDITIONS

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

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

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

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

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

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

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

- (G4) Any document submitted shall be certified as being true, accurate, and complete by a responsible official.
 - (a) Submissions to the Division.
 - (i) Any submissions to the Division including reports, certifications, and emission inventories required under this permit shall be submitted as separate, stand-alone documents and shall be sent to:
 - Administrator, Air Quality Division
 - 122 West 25th Street
 - Cheyenne, Wyoming 82002
 - (ii) A copy of each submission to the Administrator under paragraph (a)(i) of this condition shall be sent to the DEQ Air Quality Contact listed on page 3 of this permit.
 - (b) Submissions to EPA.
 - (i) Each certification required under condition C1 of this permit shall also be sent to:
 - Assistant Regional Administrator
 - Office of Enforcement, Compliance, and Environmental Justice (8ENF-T)
 - U.S. EPA - Region VIII
 - 999 18th Street - Suite 300
 - Denver, CO 80202-2466.
 - (ii) All other required submissions to EPA shall be sent to:
 - Office of Partnerships and Regulatory Assistance
 - Air and Radiation Program (8P-AR)
 - U.S. EPA - Region VIII
 - 999 18th Street - Suite 300
 - Denver, CO 80202

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

- (G5) The permittee may change operations without a permit revision provided that:
- (a) The change is not a modification under any provision of title I of the Clean Air Act;
 - (b) The change has met the requirements of Chapter 6, Section 2 of the WAQSR and is not a modification under Chapter 5, Section 2 or Chapter 6, Section 4 of the WAQSR and the changes do not exceed the emissions allowed under the permit (whether expressed therein as a rate of emissions or in terms of total emissions); and
 - (c) The permittee provides EPA and the Division with written notification at least 14 days in advance of the proposed change. The permittee, EPA, and the Division shall attach such notice to their copy of the relevant permit. For each such change, the written notification required shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change. The permit shield, if one exists for this permit, shall not apply to any such change made.

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

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

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

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

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

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

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

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

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

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

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

- (G11) The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Air Act, Article 2 of the Wyoming Environmental Quality Act, and the WAQSR and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

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

- (G12) This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

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

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

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

- (G14) The permittee shall furnish to the Division, within a reasonable time, any information that the Division may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Division copies of records required to be kept by the permit, including information claimed and shown to be confidential under W.S. 35-11-1101 (a) of the Wyoming Environmental Quality Act. Upon request by the Division, the permittee shall also furnish confidential information directly to EPA along with a claim of confidentiality.

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

- (G15) There are no emissions trading provisions in this permit.

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

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

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

- (G17) The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency, as defined in Ch 6, Sec 3(l)(i) of the WAQSR. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (a) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (b) the permitted facility was, at the time, being properly operated;

- (c) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit;
- (d) the permittee submitted notice of the emergency to the Division within one working day of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

Carbon Monoxide: [WAQSR Ch 3, Sec 5]

- (G18) The emission of carbon monoxide in stack gases from any stationary source shall be limited as may be necessary to prevent ambient standards from being exceeded.

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

- (G19) The permittee conducting an open burn shall comply with all rules and regulations of the Wyoming Department of Environmental Quality, Division of Air Quality, and with the Wyoming Environmental Quality Act.
 - (a) No person shall burn prohibited materials using an open burning method, except as may be authorized by permit. "**Prohibited materials**" means substances including, but not limited to; natural or synthetic rubber products, including tires; waste petroleum products, such as oil or used oil filters; insulated wire; plastic products, including polyvinyl chloride ("PVC") pipe, tubing and connectors; tar, asphalt, asphalt shingles, or tar paper; railroad ties; wood, wood waste, or lumber that is painted or chemically treated; explosives or ammunition; batteries; hazardous waste products; asbestos or asbestos containing materials; or materials which cause dense smoke discharges, excluding refuse and flaring associated with oil and gas well testing, completions and well workovers.
 - (b) No person or organization shall conduct or cause or permit open burning for the disposal of trade wastes, for a salvage operation, for the destruction of fire hazards if so designated by a jurisdictional fire authority, or for fire fighting training, except when it can be shown by a person or organization that such open burning is absolutely necessary and in the public interest. Any person or organization intending to engage in such open burning shall file a request to do so with the Division.

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

- (G20) No person shall cause or permit the installation or use of any device, contrivance, or operational schedule which, without resulting in reduction of the total amount of air contaminant released to the atmosphere, shall dilute or conceal an emission from a source. This condition shall not apply to the control of odors.

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

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

Asbestos: [WAQSR Ch 3, Sec 8]

- (G22) The permittee shall comply with emission standards for asbestos during abatement, demolition, renovation, manufacturing, spraying and fabricating activities.
 - (a) No owner or operator shall build, erect, install, or use any article, machine, equipment, process, or method, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous dilutants to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specified size.
 - (b) All owners and operators conducting an asbestos abatement project, including an abatement project on a residential building, shall be responsible for complying with Federal requirements and State standards for packaging, transportation, and delivery to an approved waste disposal facility as provided in paragraph (m) of Ch 3, Sec 8.
 - (c) The permittee shall follow State and Federal standards for any demolition and renovation activities conducted at this facility, including:

- (i) A thorough inspection of the affected facility or part of the facility where the demolition or renovation activity will occur shall be conducted to determine the presence of asbestos, including Category I and Category II non-friable asbestos containing material. The results of the inspection will determine which notification and asbestos abatement procedures are applicable to the activity.
- (ii) The owner or operator shall follow the appropriate notification requirements of Chapter 3, Section 8(i)(ii).
- (iii) The owner or operator shall follow the appropriate procedures for asbestos emissions control, as specified in Chapter 3, Section 8(i)(iii).
- (d) No owner or operator of a facility may install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. The provisions of this paragraph do not apply to spray-applied insulating materials regulated under paragraph (j) of Ch 3, Sec 8.
- (e) The permittee shall comply with all other requirements of WAQSR Ch 3, Sec 8.

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

- (G23) The permittee shall minimize fugitive dust in compliance with standards in Ch 3, Sec 2(f) of WAQSR for construction/demolition activities, handling and transportation of materials, and agricultural practices.

Stratospheric Ozone Protection Requirements: [40 CFR Part 82]

- (G24) The permittee shall comply with all applicable Stratospheric Ozone Protection Requirements, including but not limited to:

- (a) *Standards for Appliances* [40 CFR Part 82, Subpart F]
The permittee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F - Recycling and Emissions Reduction, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - (i) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
 - (ii) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
 - (iii) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
 - (iv) Persons disposing of small appliances, MVACs and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like appliance" as defined at §82.152.)
 - (v) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.166.
 - (vi) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
 - (vii) The permittee shall comply with all other requirements of Subpart F.
- (b) *Standards for Motor Vehicle Air Conditioners* [40 CFR Part 82, Subpart B]
If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC-22 refrigerant.

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

- (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 matter	50 micrograms per cubic meter	annual arithmetic mean	2 (a)
	150 micrograms per cubic meter	24-hr average concentration with not more than one exceedance per year	
PM _{2.5} particulate matter	15 micrograms per cubic meter	annual arithmetic mean	2 (b)
	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 with not more than one exceedance per year	
Hydrogen sulfide	70 micrograms per cubic meter	½ hour average not to be exceeded more than two times per year	7
	40 micrograms per cubic meter	½ hour average not to be exceeded more than two times in any five consecutive days	
Suspended sulfate	0.25 milligrams SO ₃ per 100 square centimeters per day	maximum annual average	8
	0.50 milligrams SO ₃ per 100 square centimeters per day	maximum 30-day value	
Lead and its compounds	1.5 micrograms per cubic meter	maximum arithmetic mean averaged over a calendar quarter	10

Hydrogen Sulfide: [WAQSR Ch 3, Sec 7]

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

Odors: [WAQSR Ch 2, Sec 11]

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

ACID RAIN PERMIT CONDITIONS
ACID RAIN PORTION OF THE OPERATING PERMIT

Issued to: Wygen Station I
 Operated by: Black Hills Power and Light Company
 ORIS code: 55479
 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 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

Source 1	SO ₂ allowances under Tables 2, 3, or 4 of 40 CFR part 73.	There is no Phase II Acid Rain sulfur dioxide allowance allocation for this unit.
	NO _x limit	There is no applicable Acid Rain emissions limitation for nitrogen oxides for this unit.

SUMMARY OF SOURCE EMISSION LIMITS AND REQUIREMENTS

Source ID#: 1 Source Description: Coal Fired Boiler

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	0.02 lb/MMBtu, 20.3 lb/hr, 89 TPY [F7 & P60-Da1] 20 percent opacity [F4 & P60-Da1]	WAQSR Ch 6, Sec 2 Permit CT-1236A WAQSR Ch 5, Sec 2 & 40 CFR 60, Subpart Da	Test annually [F9]	Testing and continuous opacity monitoring [F11 & P60-Da3]	Test records [F13] Monitoring records [F15 & P60-Da4]	Test reports [F18] Monitoring reports [F19 & P60-Da5] Report excess emissions and permit deviations [F22]
SO ₂	Emission Inventory [F3] 0.20 lb/MMBtu and 202.8 lb/hr (three-hour block average); 0.17 lb/MMBtu and 172.4 lb/hr (30-day rolling average); and 755 TPY [F7 & P60-Da1] 70% reduction [P60-Da1]	WAQSR Ch 6, Sec 2 Permit CT-1236A WAQSR Ch 5, Sec 2 & 40 CFR 60, Subpart Da	Testing if required [F10]	Continuous emissions monitoring [F11 & P60-Da3]	Monitoring records [F15 & P60-Da4] Inventory records [F17]	Monitoring reports [F19 & P60-Da5] Inventory reports [F21] Report excess emissions and permit deviations [F22]
	Title IV Allowances [F2] No Phase II allowance allocation [AR-2]	WAQSR Ch 6, Sec 3 (h)(i)(D) and 40 CFR 72	None	40 CFR 75, Subpart B	40 CFR 75, Subpart F	40 CFR 75, Subpart G
NO _x	1.6 lb/MW-hr on a 30-day rolling average, 168.0 lb/hr, 736 TPY [F7 & P60-Da1]	WAQSR Ch 6, Sec 2 Permit CT-1236A WAQSR Ch 5, Sec 2 & 40 CFR 60, Subpart Da	Test annually [F9]	Continuous emissions monitoring [F11 & P60-Da3]	Monitoring records [F15 & P60-Da4]	Monitoring reports [F19 & P60-Da5] Report excess emissions and permit deviations [F22]
	No applicable Acid Rain emission limitation [AR-2]	40 CFR 76	None	40 CFR 75, Subpart B	40 CFR 75, Subpart F	40 CFR 75, Subpart G
CO	0.15 lb/MMBtu, 152.1 lb/hr, 666 TPY [F7]	WAQSR Ch 6, Sec 2 Permits CT-1236A	Test annually [F9]	Monitoring [F11]	Test records [F13]	Test reports [F18] Report excess emissions and permit deviations [F22]
VOCs	0.015 lb/MMBtu, 15.2 lb/hr, 67 TPY [F7]	WAQSR Ch 6, Sec 2 Permits CT-1236A	Testing if required [F10]	Reliance on test results [F11]	Test records [F13]	Report excess emissions and permit deviations [F22]

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#: 2, 4, 6 & 7 Source Description: Baghouse Controlled Sources

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity [F4] gr/dscf, lb/hr, and TPY limits [F8]	WAQSR Ch 6, Sec 2 Permit CT-1236A	Testing if required [F10]	Daily observations [F12]	Monitoring records [F14]	Monitoring reports [F19] Report excess emissions and permit deviations [F22]

Source ID#: 3A, 3B & 5A, 5B Source Description: Scrubber Controlled Sources

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	20 percent opacity [F4] gr/dscf, lb/hr, and TPY limits [F8]	WAQSR Ch 6, Sec 2 Permit CT-1236A	Testing if required [F10]	Daily observations [F12]	Monitoring records [F14]	Monitoring reports [F19] Report excess emissions and permit deviations [F22]

Source ID#: None Source Description: Dry Waste Unloading and Truck Loading, Haul Road Fugitive Emissions

Pollutant	Emissions Limit / Work Practice Standard	Corresponding Regulation(s)	Testing Requirements	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Particulate	Maintain and operate chute [F5] Fugitive emissions control [F6]	WAQSR Ch 6, Sec 2 Permit CT-1236A	None	None	Fugitive emissions control records [F16]	Fugitive emissions control reports [F20] Report excess emissions and permit deviations [F22]

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

ABBREVIATIONS

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

DEFINITIONS

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

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

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

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

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

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

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

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

"Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

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

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

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

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

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

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

emission rate applicable to the source category and prevailing at the time, in the category or subcategory for categories and subcategories with 30 or more sources, or

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

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

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

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

"Regulated air pollutant" means the following:

- (a) Nitrogen oxides (NO_x) or any volatile organic compound;
- (b) Any pollutant for which a national ambient air quality standard has been promulgated;
- (c) Any pollutant that is subject to any standard established in Chapter 5, Section 2 of the WAQSR or Section 111 of the Act;
- (d) Any Class I or II substance subject to a standard promulgated under or established by title VI of the Act; or
- (e) Any pollutant subject to a standard promulgated under Section 112 or other requirements established under Section 112 of the Act, including Sections 112(g), (j), and (r) of the Act, including the following:
 - (i) Any pollutant subject to requirements under Section 112(j) of the Act. If EPA fails to promulgate a standard by the date established pursuant to Section 112(e) of the Act, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established pursuant to Section 112(e) of the Act; and
 - (ii) Any pollutant for which the requirements of Section 112(g)(2) of the Act have been met, but only with respect to the individual source subject to Section 112(g)(2) requirement.
- (f) Pollutants regulated solely under Section 112(r) of the Act are to be regulated only with respect to the requirements of Section 112(r) for permits issued under this Chapter 6, Section 3 of the WAQSR.

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

"Responsible official" means one of the following:

- (a) For a corporation:

- (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
- (ii) A duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
 - (A) the facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
 - (B) the delegation of authority to such representative is approved in advance by the Division;
- (b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- (c) For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency; or
- (d) For affected sources:
 - (i) The designated representative or alternate designated representative in so far as actions, standards, requirements, or prohibitions under title IV of the Act or the regulations promulgated thereunder are concerned; and
 - (ii) The designated representative, alternate designated representative, or responsible official under Chapter 6, Section 3(b)(xxvi) of the WAQSR for all other purposes under this section.

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



APPENDIX A
40 CFR 60 SUBPART Da



Subpart Da-Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978

Source: 44 FR 33613, June 11, 1979, unless otherwise noted.

§ 60.40a Applicability and designation of affected facility.

(a) The affected facility to which this subpart applies is each electric utility steam generating unit:

(1) That is capable of combusting more than 73 megawatts (250 million Btu/hour) heat input of fossil fuel (either alone or in combination with any other fuel); and

(2) For which construction or modification is commenced after September 18, 1978.

(b) Unless and until subpart GG of this part extends the applicability of subpart GG of this part to electric utility steam generators, this subpart applies to electric utility combined cycle gas turbines that are capable of combusting more than 73 megawatts (250 million Btu/hour) heat input of fossil fuel in the steam generator. Only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG of this part.)

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

(d) Any change to an existing steam generating unit originally designed to fire gaseous or liquid fossil fuels, to accommodate the use of any other fuel (fossil or nonfossil) shall not bring that unit under the applicability of this subpart.

[44 FR 33613, June 11, 1979, as amended at 63 FR 49453, Sept. 16, 1998]

§ 60.41a Definitions.

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

Anthracite means coal that is classified as anthracite according to the American Society of Testing and Materials' (ASTM) Standard Specification for Classification of Coals by Rank D388-77 (incorporated by reference--see §60.17).

Available purchase power means the lesser of the following:

(a) The sum of available system capacity in all neighboring companies.

(b) The sum of the rated capacities of the power interconnection devices between the principal company and all neighboring companies, minus the sum of the electric power load on these interconnections.

(c) The rated capacity of the power transmission lines between the power interconnection devices and the electric generating units (the unit in the principal company that has the malfunctioning flue gas desulfurization system and the unit(s) in the neighboring company supplying replacement

electrical power) less the electric power load on these transmission lines.

Available system capacity means the capacity determined by subtracting the system load and the system emergency reserves from the net system capacity.

Boiler operating day means a 24-hour period during which fossil fuel is combusted in a steam generating unit for the entire 24 hours.

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

Combined cycle gas turbine means a stationary turbine combustion system where heat from the turbine exhaust gases is recovered by a steam generating unit.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary gas turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a heat recovery steam generating unit.

Electric utility combined cycle gas turbine means any combined cycle gas turbine used for electric generation that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam distribution system that is constructed for the purpose of providing steam to a steam electric generator that would produce electrical power for sale is also considered in determining the electrical energy output capacity of the affected facility.

Electric utility company means the largest interconnected organization, business, or governmental entity that generates electric power for sale (e.g., a holding company with operating subsidiary companies).

Electric utility steam generating unit means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

Emergency condition means that period of time when:

(a) The electric generation output of an affected facility with a malfunctioning flue gas desulfurization system cannot be reduced or electrical output must be increased because:

(1) All available system capacity in the principal company interconnected with the affected facility is being operated, and

(2) All available purchase power interconnected with the affected facility is being obtained, or

(b) The electric generation demand is being shifted as quickly as possible from an affected facility with a malfunctioning flue gas desulfurization system to one or more electrical generating units held in reserve by the principal company or by a neighboring company, or

(c) An affected facility with a malfunctioning flue gas desulfurization system becomes the only available unit to maintain a part or all of the principal company's system emergency reserves and the unit is operated in spinning reserve at the lowest practical electric generation load consistent with not causing significant physical damage to the unit. If the unit is operated at a higher load to meet load demand, an emergency condition would not exist unless the conditions under (a) of this definition apply.

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

Gross output means the gross useful work performed by the steam generated. For units generating only electricity, the gross useful work performed is the gross electrical output from the turbine/generator set. For cogeneration units, the gross useful work performed is the gross electrical output plus one half the useful thermal output (i.e., steam delivered to an industrial process).

24-hour period means the period of time between 12:01 a.m. and 12:00 midnight.

Interconnected means that two or more electric generating units are electrically tied together by a network of power transmission lines, and other power transmission equipment.

Lignite means coal that is classified as lignite A or B according to the American Society of Testing and Materials' (ASTM) Standard Specification for Classification of Coals by Rank D388-77, 90, 91, 95, or 98a (incorporated by reference--see §60.17).

Neighboring company means any one of those electric utility companies with one or more electric power interconnections to the principal company and which have geographically adjoining service areas.

Net system capacity means the sum of the net electric generating capability (not necessarily equal to rated capacity) of all electric generating equipment owned by an electric utility company (including steam generating units, internal combustion engines, gas turbines, nuclear units, hydroelectric units, and all other electric generating equipment) plus firm contractual purchases that are interconnected to the affected facility that has

the malfunctioning flue gas desulfurization system. The electric generating capability of equipment under multiple ownership is prorated based on ownership unless the proportional entitlement to electric output is otherwise established by contractual arrangement.

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Potential combustion concentration means the theoretical emissions (ng/J, lb/million Btu heat input) that would result from combustion of a fuel in an uncleaned state without emission control systems) and:

(a) For particulate matter is:

(1) 3,000 ng/J (7.0 lb/million Btu) heat input for solid fuel; and

(2) 73 ng/J (0.17 lb/million Btu) heat input for liquid fuels.

(b) For sulfur dioxide is determined under §60.48a (b).

(c) For nitrogen oxides is:

(1) 290 ng/J (0.67 lb/million Btu) heat input for gaseous fuels;

(2) 310 ng/J (0.72 lb/million Btu) heat input for liquid fuels; and

(3) 990 ng/J (2.30 lb/million Btu) heat input for solid fuels.

Potential electrical output capacity is defined as 33 percent of the maximum design heat input capacity of the steam generating unit (e.g., a steam generating unit with a 100-MW (340 million Btu/hr) fossil-fuel heat input capacity would have a 33-MW potential electrical output capacity). For electric utility combined cycle gas turbines the potential electrical output capacity is determined on the basis of the fossil-fuel firing capacity of the steam generator exclusive of the heat input and electrical power contribution by the gas turbine.

Principal company means the electric utility company or companies which own the affected facility.

Resource recovery unit means a facility that combusts more than 75 percent non-fossil fuel on a quarterly (calendar) heat input basis.

Solid-derived fuel means any solid, liquid, or gaseous fuel derived from solid fuel for the purpose of creating useful heat and includes, but is not limited to, solvent refined coal, liquified coal, and gasified coal.

Spare flue gas desulfurization system module means a separate system of sulfur dioxide emission control equipment capable of treating an amount of flue gas equal to the total amount of flue gas generated by an affected facility when operated at maximum capacity divided by the total number of nonspare flue gas desulfurization modules in the system.

Spinning reserve means the sum of the unutilized net generating capability of all units of the electric utility company that are synchronized to the power distribution system

and that are capable of immediately accepting additional load. The electric generating capability of equipment under multiple ownership is prorated based on ownership unless the proportional entitlement to electric output is otherwise established by contractual arrangement.

Steam generating unit means any furnace, boiler, or other device used for combusting fuel for the purpose of producing steam (including fossil-fuel-fired steam generators associated with combined cycle gas turbines; nuclear steam generators are not included).

Subbituminous coal means coal that is classified as subbituminous A, B, or C according to the American Society of Testing and Materials (ASTM) Standard Specification for Classification of Coals by Rank D388-77, 90, 91, 95, or 98a (incorporated by reference-- see §60.17).

System emergency reserves means an amount of electric generating capacity equivalent to the rated capacity of the single largest electric generating unit in the electric utility company (including steam generating units, internal combustion engines, gas turbines, nuclear units, hydroelectric units, and all other electric generating equipment) which is interconnected with the affected facility that has the malfunctioning flue gas desulfurization system. The electric generating capability of equipment under multiple ownership is prorated based on ownership unless the proportional entitlement to electric output is otherwise established by contractual arrangement.

System load means the entire electric demand of an electric utility company's service area interconnected with the affected facility that has the malfunctioning flue gas desulfurization system plus firm contractual sales to other electric utility companies. Sales to other electric utility companies (e.g., emergency power) not on a firm contractual basis may also be included in the system load when no available system capacity exists in the electric utility company to which the power is supplied for sale.

[44 FR 33613, June 11, 1979, as amended at 48 FR 3737, Jan. 27, 1983; 63 FR 49453, Sept. 16, 1998; 65 FR 61752, Oct. 17, 2000; 66 FR 18551, Apr. 10, 2001]

§ 60.42a Standard for particulate matter.

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

(1) 13 ng/J (0.03 lb/million Btu) heat input derived from the combustion of solid, liquid, or gaseous fuel;

(2) 1 percent of the potential combustion concentration (99 percent reduction) when combusting solid fuel; and

(3) 30 percent of potential combustion concentration (70 percent reduction) when combusting liquid fuel.

(b) On and after the date the particulate matter performance test required to be conducted under §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

§ 60.43a Standard for sulfur dioxide.

(a) On and after the date on which the initial performance test required to be conducted under §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility which combusts solid fuel or solid-derived fuel, except as provided under paragraphs (c), (d), (f) or (h) of this section, any gases which contain sulfur dioxide in excess of:

(1) 520 ng/J (1.20 lb/million Btu) heat input and 10 percent of the potential combustion concentration (90 percent reduction), or

(2) 30 percent of the potential combustion concentration (70 percent reduction), when emissions are less than 260 ng/J (0.60 lb/million Btu) heat input.

(b) On and after the date on which the initial performance test required to be conducted under §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility which combusts liquid or gaseous fuels (except for liquid or gaseous fuels derived from solid fuels and as provided under paragraphs (e) or (h) of this section), any gases which contain sulfur dioxide in excess of:

(1) 340 ng/J (0.80 lb/million Btu) heat input and 10 percent of the potential combustion concentration (90 percent reduction), or

(2) 100 percent of the potential combustion concentration (zero percent reduction) when emissions are less than 86 ng/J (0.20 lb/million Btu) heat input.

(c) On and after the date on which the initial performance test required to be conducted under §60.8 is complete, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility which combusts solid solvent refined coal (SRC-1) any gases which contain sulfur dioxide in excess of 520 ng/J (1.20 lb/million Btu) heat input and 15 percent of the potential combustion concentration (85 percent reduction) except as provided under paragraph (f) of this section; compliance with the emission limitation is determined on a 30-day rolling average basis and compliance with the percent reduction requirement is determined on a 24-hour basis.

(d) Sulfur dioxide emissions are limited to 520 ng/J (1.20 lb/million Btu) heat input from any affected facility which:

- (1) Combusts 100 percent anthracite,
- (2) Is classified as a resource recovery facility, or
- (3) Is located in a noncontinental area and combusts solid fuel or solid-derived fuel.
- (e) Sulfur dioxide emissions are limited to 340 ng/J (0.80 lb/million Btu) heat input from any affected facility which is located in a noncontinental area and combusts liquid or gaseous fuels (excluding solid-derived fuels).
- (f) The emission reduction requirements under this section do not apply to any affected facility that is operated under an SO₂ commercial demonstration permit issued by the Administrator in accordance with the provisions of §60.45a.
- (g) Compliance with the emission limitation and percent reduction requirements under this section are both determined on a 30-day rolling average basis except as provided under paragraph (c) of this section.
- (h) When different fuels are combusted simultaneously, the applicable standard is determined by proration using the following formula:

(1) If emissions of sulfur dioxide to the atmosphere are greater than 260 ng/J (0.60 lb/million Btu) heat input:

$$E_s = (340x + 520 y)/100$$

and

$$\%P_s = 10$$

(2) If emissions of sulfur dioxide to the atmosphere are equal to or less than 260 ng/J (0.60 lb/million Btu) heat input:

$$E_s = (340x + 520 y)/100$$

and

$$\%P_s = (10x + 30 y)/100$$

where:

E_s is the prorated sulfur dioxide emission limit (ng/J heat input),

%P_s is the percentage of potential sulfur dioxide emission allowed.

x is the percentage of total heat input derived from the combustion of liquid or gaseous fuels (excluding solid-derived fuels)

y is the percentage of total heat input derived from the combustion of solid fuel (including solid-derived fuels)

[44 FR 33613, June 11, 1979, as amended at 54 FR 6663, Feb. 14, 1989; 54 FR 21344, May 17, 1989; 65 FR 61752, Oct. 17, 2000]

§ 60.44a Standard for nitrogen oxides.

(a) On and after the date on which the initial performance test required to be conducted under §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility, except as provided under paragraphs (b) and (d) of this section, any gases which contain nitrogen oxides (expressed as NO_x) in excess of the following emission limits, based on a 30-day rolling average, except as provided under §60.46a(j)(1):

(1) NO_x emission limits.

Fuel type	Emission limit for heat input	
	ng/J	lb/ million Btu
Gaseous fuels:		
Coal-derived fuels	210	0.50
All other fuels	86	0.20
Liquid fuels:		
Coal-derived fuels	210	0.50
Shale oil	210	0.50
All other fuels	130	0.30
Solid fuels:		
Coal-derived fuels	210	0.50
Any fuel containing 25%, by weight, coal refuse	(¹)	(¹)
Any fuel containing more than 25%, by weight, lignite if the lignite is mined in North Dakota, South Dakota, or Montana, and is combusted in a slag tap furnace ²	340	0.80
Any fuel containing more than 25%, by weight, lignite not subject to the 340 ng/J heat input emission limit ²		
Subbituminous coal	210	0.50
Bituminous coal	260	0.60
Anthracite coal	260	0.60
All other fuels	260	0.60

¹ Exempt from NO_x standards and NO_x monitoring requirements.

² Any fuel containing less than 25%, by weight, lignite is not prorated but its percentage is added to the percentage of the predominant fuel.

(2) NO_x reduction requirement.

Fuel type	Percent reduction of potential combustion concentration
Gaseous fuels.....	25
Liquid fuels.....	30
Solid fuels.....	65

(b) The emission limitations under paragraph (a) of this section do not apply to any affected facility which is combusting coal-derived

liquid fuel and is operating under a commercial demonstration permit issued by the Administrator in accordance with the provisions of §60.45a.

(c) Except as provided under paragraph (d) of this section, when two or more fuels are combusted simultaneously, the applicable standard is determined by proration using the following formula:

$$E_n = [86w + 130x + 210y + 260z + 340v]/100$$

where:

E_n is the applicable standard for nitrogen oxides when multiple fuels are combusted simultaneously (ng/J heat input);

w is the percentage of total heat input derived from the combustion of fuels subject to the 86 ng/J heat input standard;

x is the percentage of total heat input derived from the combustion of fuels subject to the 130 ng/J heat input standard;

y is the percentage of total heat input derived from the combustion of fuels subject to the 210 ng/J heat input standard;

z is the percentage of total heat input derived from the combustion of fuels subject to the 260 ng/J heat input standard; and

v is the percentage of total heat input delivered from the combustion of fuels subject to the 340 ng/J heat input standard.

(d)(1) On and after the date on which the initial performance test required to be conducted under §60.8 is completed, no new source owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which construction commenced after July 9, 1997 any gases which contain nitrogen oxides (expressed as NO₂) in excess of 200 nanograms per joule (1.6 pounds per megawatt-our) gross energy output, based on a 30-day rolling average, except as provided under §60.46a(k)(1).

(2) On and after the date on which the initial performance test required to be conducted under §60.8 is completed, no existing source owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility for which reconstruction commenced after July 9, 1997 any gases which contain nitrogen oxides (expressed as NO₂) in excess of 65 ng/Jl (0.15 pounds per million Btu) heat input, based on a 30-day rolling average.

[44 FR 33613, June 11, 1979, as amended at 54 FR 6664, Feb. 14, 1989; 63 FR 49453, Sept. 16, 1998; 66 FR 18551, Apr. 10, 2001; 66 FR 42610, Aug. 14, 2001]

§60.45a Commercial demonstration permit.

(a) An owner or operator of an affected facility proposing to demonstrate an emerging technology may apply to the Administrator for a commercial demonstration permit. The Administrator will issue a commercial demonstration permit in accordance with paragraph (e) of this section. Commercial demonstration permits may be issued only by the Administrator, and this authority will not be delegated.

(b) An owner or operator of an affected facility that combusts solid solvent refined coal (SRC-I) and who is issued a commercial demonstration permit by the Administrator is not subject to the SO₂ emission reduction requirements under §60.43a(c) but must, as a minimum, reduce SO₂ emissions to 20 percent of the potential combustion concentration (80 percent reduction) for each 24-hour period of steam generator operation and to less than 520 ng/J (1.20 lb/million Btu) heat input on a 30-day rolling average basis.

(c) An owner or operator of a fluidized bed combustion electric utility steam generator (atmospheric or pressurized) who is issued a commercial demonstration permit by the Administrator is not subject to the SO₂ emission reduction requirements under

§60.43a(a) but must, as a minimum, reduce SO₂ emissions to 15 percent of the potential combustion concentration (85 percent reduction) on a 30-day rolling average basis and to less than 520 ng/J (1.20 lb/million Btu) heat input on a 30-day rolling average basis.

(d) The owner or operator of an affected facility that combusts coal-derived liquid fuel and who is issued a commercial demonstration permit by the Administrator is not subject to the applicable NO_x emission limitation and percent reduction under §60.44a(a) but must, as a minimum, reduce emissions to less than 300 ng/J (0.70 lb/million Btu) heat input on a 30-day rolling average basis.

(e) Commercial demonstration permits may not exceed the following equivalent MW electrical generation capacity for any one technology category, and the total equivalent MW electrical generation capacity for all commercial demonstration plants may not exceed 15,000 MW.

Technology	Pollutant	Equivalent electrical capacity (MW electrical output)
Solid solvent refined coal (SRC I).....	SO ₂	6,000 - 10,000
Fluidized bed combustion (atmospheric).....	SO ₂	400 - 3,000
Fluidized bed combustion (pressurized).....	SO ₂	400 - 1,200
Coal liquification.....	NO _x	750 - 10,000
Total allowable for all technologies.....		15,000

§ 60.46a Compliance provisions.

(a) Compliance with the particulate matter emission limitation under §60.42a (a)(1) constitutes compliance with the percent reduction requirements for particulate matter under §60.42a (a)(2) and (3).

(b) Compliance with the nitrogen oxides emission limitation under §60.44a (a) constitutes compliance with the percent reduction requirements under §60.44a (a)(2).

(c) The particulate matter emission standards under §60.42a and the nitrogen oxides emission standards under §60.44a apply at all times except during periods of startup, shutdown, or malfunction. The sulfur dioxide emission standards under §60.43a apply at all times except during periods of startup, shutdown, or when both emergency conditions exist and the procedures under paragraph (d) of this section are implemented.

(d) During emergency conditions in the principal company, an affected facility with a malfunctioning flue gas desulfurization

system may be operated if sulfur dioxide emissions are minimized by:

(1) Operating all operable flue gas desulfurization system modules, and bringing back into operation any malfunctioned module as soon as repairs are completed,

(2) Bypassing flue gases around only those flue gas desulfurization system modules that have been taken out of operation because they were incapable of any sulfur dioxide emission reduction or which would have suffered significant physical damage if they had remained in operation, and

(3) Designing, constructing, and operating a spare flue gas desulfurization system module for an affected facility larger than 365 MW (1,250 million Btu/hr) heat input (approximately 125 MW electrical output capacity). The Administrator may at his discretion require the owner or operator within 60 days of notification to demonstrate spare module capability. To demonstrate this capability, the owner or operator must

demonstrate compliance with the appropriate requirements under paragraph (a), (b), (d), (e), and (h) under §60.43a for any period of operation lasting from 24 hours to 30 days when:

(i) Any one flue gas desulfurization module is not operated,

(ii) The affected facility is operating at the maximum heat input rate,

(iii) The fuel fired during the 24-hour to 30-day period is representative of the type and average sulfur content of fuel used over a typical 30-day period, and

(iv) The owner or operator has given the Administrator at least 30 days notice of the date and period of time over which the demonstration will be performed.

(e) After the initial performance test required under §60.8, compliance with the sulfur dioxide emission limitations and percentage reduction requirements under §60.43a and the nitrogen oxides emission limitations under §60.44a is based on the average emission rate

for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day average emission rate for both sulfur dioxide and nitrogen oxides and a new percent reduction for sulfur dioxide are calculated to show compliance with the standards.

(f) For the initial performance test required under §60.8, compliance with the sulfur dioxide emission limitations and percent reduction requirements under §60.43a and the nitrogen oxides emission limitation under §60.44a is based on the average emission rates for sulfur dioxide, nitrogen oxides, and percent reduction for sulfur dioxide for the first 30 successive boiler operating days. The initial performance test is the only test in which at least 30 days prior notice is required unless otherwise specified by the Administrator. The initial performance test is to be scheduled so that the first boiler operating day of the 30 successive boiler operating days is completed within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of the facility.

(g) Compliance is determined by calculating the arithmetic average of all hourly emission rates for SO₂ and NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction (NO_x only), or emergency conditions (SO₂ only). Compliance with the percentage reduction requirement for SO₂ is determined based on the average inlet and average outlet SO₂ emission rates for the 30 successive boiler operating days.

(h) If an owner or operator has not obtained the minimum quantity of emission data as required under §60.47a of this subpart, compliance of the affected facility with the emission requirements under §§60.43a and 60.44a of this subpart for the day on which the 30-day period ends may be determined by the Administrator by following the applicable procedures in section 7 of Method 19.

(i) Compliance provisions for sources subject to §60.44a (d)(1). The owner or operator of an affected facility subject to §60.44a (d)(1) (new source constructed after July 7, 1997) shall calculate NO_x emissions by multiplying the average hourly NO_x output concentration, measured according to the provisions of §60.47a(c), by the average hourly flow rate, measured according to the provisions of §60.47a (l), and divided by the average hourly gross energy output, measured according to the provisions of §60.47a (k).

(j) Compliance provisions for duct burners subject to §60.44a (a)(1). To determine compliance with the emissions limits for NO_x required by §60.44a(a) for duct burners used in combined cycle systems, either of the procedures described in paragraph (j)(1) or (2) of this section may be used:

(1) The owner or operator of an affected duct burner shall conduct the performance test required under §60.8 using the appropriate methods in appendix A of this part. Compliance with the emissions limits under §60.44a (a)(1) is determined on the average of three (nominal -hour) runs for the initial and subsequent performance tests. During the performance test, one sampling site shall be located in the exhaust of the turbine prior to the duct burner. A second sampling site shall

be located at the outlet from the heat recovery steam generating unit. Measurements shall be taken at both sampling sites during the performance test; or

(2) The owner or operator of an affected duct burner may elect to determine compliance by using the continuous emission monitoring system specified under §60.47a for measuring NO_x and oxygen and meet the requirements of §60.47a. Data from a CEMS certified (or recertified) according to the provisions of 40CFR 75.20, meeting the QA and QC requirements of 40 CFR 75.21, and validated according to 40 CFR 75.23 may be used. The sampling site shall be located at the outlet from the steam generating unit. The NO_x emission rate at the outlet from the steam generating unit shall constitute the NO_x emission rate from the duct burner of the combined cycle system.

(k) Compliance provisions for duct burners subject to §60.44a (d)(1). To determine compliance with the emissions limits for NO_x required by §60.44a(d)(1) for duct burners used in combined cycle systems, either of the procedures described in paragraphs (k)(1) and (2) of this section may be used:

(1) The owner or operator of an affected duct burner used in combined cycle systems shall determine compliance with the NO_x standard in §60.44a (d)(1) as follows:

(i) The emission rate (E) of NO_x shall be computed using Equation 1 of this section:

$$E = [(C_{sg} \times Q_{sg}) - (C_{te} \times Q_{te})] / (O_{sg} \times h) \quad (Eq. 1)$$

Where:

E = emission rate of NO_x from the duct burner, ng/J (lb/Mwh) gross output

C_{sg} = average hourly concentration of NO_x exiting the steam generating unit, ng/dscm (lb/dscf)

C_{te} = average hourly concentration of NO_x in the turbine exhaust upstream from duct burner, ng/dscm (lb/dscf)

Q_{sg} = average hourly volumetric flow rate of exhaust gas from steam generating unit, dscm/hr (dscf/hr)

Q_{te} = average hourly volumetric flow rate of exhaust gas from combustion turbine, dscm/hr (dscf/hr)

O_{sg} = average hourly gross energy output from steam generating unit, J (Mwh)

h = average hourly fraction of the total heat input to the steam generating unit derived from the combustion of fuel in the affected duct burner

(ii) Method 7E of appendix A of this part shall be used to determine the NO_x

concentrations (C_{sg} and C_{te}). Method 2, 2F, or 2G of appendix A of this part, as appropriate, shall be used to determine the volumetric flow rates (Q_{sg} and Q_{te}) of the exhaust gases. The volumetric flow rate measurements shall be taken at the same time as the concentration measurements.

(iii) The owner or operator shall develop, demonstrate, and provide information satisfactory to the Administrator to determine the average hourly gross energy output from the steam generating unit, and the average hourly percentage of the total heat input to the steam generating unit derived from the combustion of fuel in the affected duct burner.

(iv) Compliance with the emissions limits under §60.44a (d)(1) is determined by the three-run average (nominal 1-hour runs) for the initial and subsequent performance tests.

(2) The owner or operator of an affected duct burner used in a combined cycle system may elect to determine compliance with the NO_x standard in §60.44a(d)(1) on a 30-day rolling

average basis as indicated in paragraphs (k)(2)(i) through (iv) of this section.

(i) The emission rate (E) of NO_x shall be computed using Equation 2 of this section:

$$E = (C_{sg} \times Q_{sd}) / Occ \quad (Eq. 2)$$

Where:

E = emission rate of NO_x from the duct burner, ng/J (lb/Mwh) gross output

C_{sg} = average hourly concentration of NO_x exiting the steam generating unit, ng/dscm (lb/dscf)

Q_{sg} = average hourly volumetric flow rate of exhaust gas from steam generating unit, dscm/hr (dscf/hr)

Occ = average hourly gross energy output from entire combined cycle unit, J (Mwh)

(ii) The continuous emissions monitoring system specified under §60.47a for measuring NO_x and oxygen shall be used to determine the average hourly NO_x concentrations (C_{sg}). The continuous flow monitoring system specified in §60.47a (l) shall be used to

determine the volumetric flow rate (Q_{sg}) of the exhaust gas. The sampling site shall be located at the outlet from the steam generating unit. Data from a continuous flow monitoring system certified (or recertified) following procedures specified in 40 CFR 75.20, meeting the quality assurance and quality control requirements of 40 CFR 75.21, and validated according to 40 CFR 75.23 may be used.

(iii) The continuous monitoring system specified under §60.47a(k) for measuring and determining gross energy output shall be used to determine the average hourly gross energy output from the entire combined cycle unit (Occ), which is the combined output from the combustion turbine and the steam generating unit.

(iv) The owner or operator may, in lieu of installing, operating, and recording data from the continuous flow monitoring system specified in §60.47a(l), determine the mass rate (lb/hr) of NO_x emissions by installing, operating, and maintaining continuous fuel flowmeters following the appropriate measurements procedures specified in appendix D of 40 CFR part 75. If this compliance option is selected, the emission rate (E) of NO_x shall be computed using Equation 3 of this section:

$$E = (ER_{sg} \times Hcc) / Occ \quad (\text{Eq. 3})$$

Where:

E = emission rate of NO_x from the duct burner, ng/J (lb/Mwh) gross output

ER_{sg} = average hourly emission rate of NO_x exiting the steam generating unit heat input calculated using appropriate F-actor as described in Method 19, ng/J (lb/million Btu)

Hcc = average hourly heat input rate of entire combined cycle unit, J/hr (million Btu/hr)

Occ = average hourly gross energy output from entire combined cycle unit, J (Mwh)

(3) When an affected duct burner steam generating unit utilizes a common steam turbine with one or more affected duct burner steam generating units, the owner or operator shall either:

(i) Determine compliance with the applicable NO_x emissions limits by measuring the emissions combined with the emissions from the other unit(s) utilizing the common steam turbine; or

(ii) Develop, demonstrate, and provide information satisfactory to the Administrator on methods for apportioning the combined gross energy output from the steam turbine for each of the affected duct burners. The Administrator may approve such demonstrated substitute methods for apportioning the combined gross energy output measured at the steam turbine whenever the demonstration ensures accurate estimation of emissions regulated under this part.

[44 FR 33613, June 11, 1979, as amended at 54 FR 6664, Feb. 14, 1989; 63 FR 49454,

Sept. 16, 1998; 66 FR 18552, Apr. 10, 2001; 66 FR 31178, June 11, 2001]

§ 60.47a Emission monitoring

(a) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the opacity of emissions discharged to the atmosphere, except where gaseous fuel is the only fuel combusted. If opacity interference due to water droplets exists in the stack (for example, from the use of an FGD system), the opacity is monitored upstream of the interference (at the inlet to the FGD system). If opacity interference is experienced at all locations (both at the inlet and outlet of the sulfur dioxide control system), alternate parameters indicative of the particulate matter control system's performance are monitored (subject to the approval of the Administrator).

(b) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring sulfur dioxide emissions, except where natural gas is the only fuel combusted, as follows:

(1) Sulfur dioxide emissions are monitored at both the inlet and outlet of the sulfur dioxide control device.

(2) For a facility which qualifies under the provisions of §60.43a (d), sulfur dioxide emissions are only monitored as discharged to the atmosphere.

(3) An "as fired" fuel monitoring system (upstream of coal pulverizers) meeting the requirements of Method 19 may be used to determine potential sulfur dioxide emissions in place of a continuous sulfur dioxide emission monitor at the inlet to the sulfur dioxide control device as required under paragraph (b)(1) of this section.

(c)(1) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere; or

(2) If the owner or operator has installed a nitrogen oxides emission rate continuous emission monitoring system (CEMS) to meet the requirements of part 75 of this chapter and is continuing to meet the ongoing requirements of part 75 of this chapter, that CEMS may be used to meet the requirements of this section, except that the owner or operator shall also meet the requirements of §60.49a. Data reported to meet the requirements of §60.49a shall not include data substituted using the missing data procedures in subpart D of part 75 of this chapter, nor shall the data have been bias adjusted according to the procedures of part 75 of this chapter.

(d) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the oxygen or carbon dioxide content of the

flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored.

(e) The continuous monitoring systems under paragraphs (b), (c), and (d) of this section are operated and data recorded during all periods of operation of the affected facility including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.

(f) The owner or operator shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, the owner or operator shall supplement emission data with other monitoring systems approved by the Administrator or the reference methods and procedures as described in paragraph (h) of this section.

(g) The 1-hour averages required under paragraph §60.13(h) are expressed in ng/J (lbs/million Btu) heat input and used to calculate the average emission rates under §60.46a. The 1-hour averages are calculated using the data points required under §60.13(b). At least two data points must be used to calculate the 1-hour averages.

(h) When it becomes necessary to supplement continuous monitoring system data to meet the minimum data requirements in paragraph (f) of this section, the owner or operator shall use the reference methods and procedures as specified in this paragraph. Acceptable alternative methods and procedures are given in paragraph (j) of this section.

(1) Method 6 shall be used to determine the SO₂ concentration at the same location as the SO₂ monitor. Samples shall be taken at 60-minute intervals. The sampling time and sample volume for each sample shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Each sample represents a 1-hour average.

(2) Method 7 shall be used to determine the NO_x concentration at the same location as the NO_x monitor. Samples shall be taken at 30-minute intervals. The arithmetic average of two consecutive samples represents a 1-hour average.

(3) The emission rate correction factor, integrated bag sampling and analysis procedure of Method 3B shall be used to determine the O₂ or CO₂ concentration at the same location as the O₂ or CO₂ monitor. Samples shall be taken for at least 309 minutes in each hour. Each sample represents a 1-hour average.

(4) The procedures in Method 19 shall be used to compute each 1-hour average concentration in ng/J (lb/million Btu) heat input.

(i) The owner or operator shall use methods and procedures in this paragraph to conduct monitoring system performance evaluations under §60.13(c) and calibration checks under §60.13(d). Acceptable alternative methods

and procedures are given in paragraph (j) of this section.

(1) Methods 3B, 6, and 7, shall be used to determine O₂, SO₂, and NO_x concentrations, respectively.

(2) SO₂ or NO_x (NO), as applicable, shall be used for preparing the calibration gas mixtures (in N₂, as applicable) under Performance Specification 2 of appendix B of this part.

(3) For affected facilities burning only fossil fuel, the span value for a continuous monitoring system for measuring opacity is between 60 and 80 percent and for a continuous monitoring system measuring nitrogen oxides is determined as follows:

Fossil Fuel	Span values for nitrogen oxides (ppm)
Gas.....	500
Liquid.....	500
Solid.....	1,000
Combination.....	500(x+y)+1,000z

where:

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

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

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

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

(5) For affected facilities burning fossil fuel, alone or in combination with non-fossil fuel, the span value of the sulfur dioxide continuous monitoring system at the inlet to the sulfur dioxide control device is 125 percent of the maximum estimated hourly potential emissions of the fuel fired, and the outlet of the sulfur dioxide control device is 50 percent of maximum estimated hourly potential emissions of the fuel fired.

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

(1) For Method 6, Method 6A or 6B (whenever Methods 6 and 3 or 3B data are used) or 6C may be used. Each Method 6B sample obtained over 24 hours represents 24 1-hour averages. If Method 6A or 6B is used under paragraph (i) of this section, the conditions under §60.46(d)(1) apply; these conditions do not apply under paragraph (h) of this section.

(2) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be 1 hour.

(3) For Method 3, Method 3A or 3B may be used if the sampling time is 1 hour.

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

(k) The procedures specified in paragraphs (k)(1) through (3) of this section shall be used to determine gross output for sources demonstrating compliance with the output-based standard under §60.44a (d)(1).

(1) The owner or operator of an affected facility with electricity generation shall install, calibrate, maintain, and operate a wattmeter; measure gross electrical output in megawatt-hour on a continuous basis; and record the output of the monitor.

(2) The owner or operator of an affected facility with process steam generation shall install, calibrate, maintain, and operate meters for steam flow, temperature, and pressure; measure gross process steam output in joules per hour (or Btu per hour) on a continuous basis; and record the output of the monitor.

(3) For affected facilities generating process steam in combination with electrical generation, the gross energy output is determined from the gross electrical output measured in accordance with paragraph (k)(1) of this section plus 50 percent of the gross thermal output of the process steam measured in accordance with paragraph (k)(2) of this section.

(l) The owner or operator of an affected facility demonstrating compliance with the output-based standard under §60.44a (d)(1) shall install, certify, operate, and maintain a continuous flow monitoring system meeting the requirements of Performance Specification 6 of appendix B and procedure 1 of appendix F of this subpart, and record the output of the system, for measuring the flow of exhaust gases discharged to the atmosphere; or

(m) Alternatively, data from a continuous flow monitoring system certified according to the requirements of 40 CFR 75.20, meeting the applicable quality control and quality assurance requirements of 40 CFR 75.21, and validated according to 40 CFR 75.23, may be used.

(n) Gas-fired and oil-fired units. The owner or operator of an affected unit that qualifies as a gas-fired or oil-fired unit, as defined in 40 CFR 72.2, may use, as an alternative to the requirements specified in either paragraph (l) or (m) of this section, a fuel flow monitoring system certified and operated according to the requirements of appendix D of 40 CFR part 75.

(o) The owner or operator of a duct burner, as described in §60.41a, which is subject to the NO_x standards of §60.44a(a)(1) or (d)(1) is not required to install or operate a continuous emissions monitoring system to measure NO_x emissions; a wattmeter to measure gross electrical output; meters to measure steam flow, temperature, and pressure; and a continuous flow monitoring system to measure the flow of exhaust gases discharged to the atmosphere.

[44 FR 33613, June 11, 1979, as amended at 54 FR 6664, Feb. 14, 1989; 55 FR 5212, Feb. 14, 1990; 55 FR 18876, May 7, 1990; 63 FR

49454, Sept. 16, 1998; 65 FR 61752, Oct. 17, 2000; 66 FR 18553, Apr. 10, 2001]

§ 60.48a Compliance determination procedures and methods.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the methods in appendix A of this part or the methods and procedures as specified in this section, except as provided in §60.8(b). Section 60.8(f) does not apply to this section for SO₂ and NO_x. Acceptable alternative methods are given in paragraph (e) of this section.

(b) The owner or operator shall determine compliance with the particulate matter standards in §60.42a as follows:

(1) The dry basis F factor (O₂) procedures in Method 19 shall be used to compute the emission rate of particulate matter.

(2) For the particulate matter concentration, Method 5 shall be used at affected facilities without wet FGD systems and Method 5B shall be used after wet FGD systems.

(i) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160±14 °C (320±25 °F).

(ii) For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O₂ concentration.

The O₂ sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O₂ traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O₂ traverse points. If the grab sampling procedure is used, the O₂ concentration for the run shall be the arithmetic mean of all the individual O₂ concentrations at each traverse point.

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

(c) The owner or operator shall determine compliance with the SO₂ standards in §60.43a as follows:

(1) The percent of potential SO₂ emissions (%Ps) to the atmosphere shall be computed using the following equation:

$$\%Ps = [(100-\%Rf)(100-\%Rg)]/100$$

where:

%Ps = percent of potential SO₂ emissions, percent.

%Rf = percent reduction from fuel pretreatment, percent.

%Rg = percent reduction by SO₂ control system, percent.

(2) The procedures in Method 19 may be used to determine percent reduction (%Rf) of

sulfur by such processes as fuel pretreatment (physical coal cleaning, hydrodesulfurization of fuel oil, etc.), coal pulverizers, and bottom and flyash interactions. This determination is optional.

(3) The procedures in Method 19 shall be used to determine the percent SO₂ reduction (%Rg) of any SO₂ control system. Alternatively, a combination of an "as fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the SO₂ control device and the average SO₂ input rate from the "as fired" fuel analysis for 30 successive boiler operating days.

(4) The appropriate procedures in Method 19 shall be used to determine the emission rate.

(5) The continuous monitoring system in §60.47a (b) and (d) shall be used to determine the concentrations of SO₂ and CO₂ or O₂.

(d) The owner or operator shall determine compliance with the NO_x standard in §60.44a as follows:

(1) The appropriate procedures in Method 19 shall be used to determine the emission rate of NO_x.

(2) The continuous monitoring system in §60.47a (c) and (d) shall be used to determine the concentrations of NO_x and CO₂ or O₂.

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

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

(2) The Fc factor (CO₂) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of §60.46(d)(1). The CO₂ shall be determined in the same manner as the O₂ concentration.

(f) Electric utility combined cycle gas turbines are performance tested for particulate matter, sulfur dioxide, and nitrogen oxides using the procedures of Method 19 (appendix A). The sulfur dioxide and nitrogen oxides emission rates from the gas turbine used in Method 19 calculations are determined when the gas turbine is performance tested under subpart GG. The potential uncontrolled particulate matter emission rate from a gas turbine is defined as 17 ng/J (0.04 lb/million Btu) heat input.

[44 FR 33613, June 11, 1979, as amended at 54 FR 6664, Feb. 14, 1989; 55 FR 5212, Feb. 14, 1990; 65 FR 61752, Oct. 17, 2000]

§ 60.49a Reporting requirements.

(a) For sulfur dioxide, nitrogen oxides, and particulate matter emissions, the performance test data from the initial performance test and from the performance evaluation of the continuous monitors (including the transmissometer) are submitted to the Administrator.

(b) For sulfur dioxide and nitrogen oxides the following information is reported to the Administrator for each 24-hour period.

(1) Calendar date.

(2) The average sulfur dioxide and nitrogen oxide emission rates (ng/J or lb/million Btu) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective actions taken.

(3) Percent reduction of the potential combustion concentration of sulfur dioxide for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken.

(4) Identification of the boiler operating days for which pollutant or diluent data have not been obtained by an approved method for at least 18 hours of operation of the facility; justification for not obtaining sufficient data; and description of corrective actions taken.

(5) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO_x only), emergency conditions (SO₂ only), or other reasons, and justification for excluding data for reasons other than startup, shutdown, malfunction, or emergency conditions.

(6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

(7) Identification of times when hourly averages have been obtained based on manual sampling methods.

(8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

(9) Description of any modifications to the continuous monitoring system which could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3.

(c) If the minimum quantity of emission data as required by §60.47a is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of §60.46a(h) is reported to the Administrator for that 30-day period:

(1) The number of hourly averages available for outlet emission rates (no) and inlet emission rates (ni) as applicable.

(2) The standard deviation of hourly averages for outlet emission rates (so) and inlet emission rates (si) as applicable.

(3) The lower confidence limit for the mean outlet emission rate (Eo*) and the upper confidence limit for the mean inlet emission rate (Ei*) as applicable.

(4) The applicable potential combustion concentration.

(5) The ratio of the upper confidence limit for the mean outlet emission rate (Eo*) and the allowable emission rate (Estd) as applicable.

(d) If any standards under §60.43a are exceeded during emergency conditions because of control system malfunction, the owner or operator of the affected facility shall submit a signed statement:

(1) Indicating if emergency conditions existed and requirements under §60.46a(d) were met during each period, and

(2) Listing the following information:

(i) Time periods the emergency condition existed;

(ii) Electrical output and demand on the owner or operator's electric utility system and the affected facility;

(iii) Amount of power purchased from interconnected neighboring utility companies during the emergency period;

(iv) Percent reduction in emissions achieved;

(v) Atmospheric emission rate (ng/J) of the pollutant discharged; and

(vi) Actions taken to correct control system malfunction.

(e) If fuel pretreatment credit toward the sulfur dioxide emission standard under §60.43a is claimed, the owner or operator of the affected facility shall submit a signed statement:

(1) Indicating what percentage cleaning credit was taken for the calendar quarter, and whether the credit was determined in accordance with the provisions of §60.48a and Method 19 (appendix A); and

(2) Listing the quantity, heat content, and date each pretreated fuel shipment was received during the previous quarter; the name and location of the fuel pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the previous quarter.

(f) For any periods for which opacity, sulfur dioxide or nitrogen oxides emissions data are not available, the owner or operator of the affected facility shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.

(g) The owner or operator of the affected facility shall submit a signed statement indicating whether:

(1) The required continuous monitoring system calibration, span, and drift checks or

other periodic audits have or have not been performed as specified.

(2) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance.

(3) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.

(4) Compliance with the standards has or has not been achieved during the reporting period.

(h) For the purposes of the reports required under §60.7, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under §60.42a(b). Opacity levels in excess of the applicable opacity standard and the date of such excesses are to

be submitted to the Administrator each calendar quarter.

(i) The owner or operator of an affected facility shall submit the written reports required under this section and subpart A to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.

(i) The owner or operator of an affected facility shall submit the written reports required under this section and subpart A to the Administrator semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period.

(j) The owner or operator of an affected facility may submit electronic quarterly reports for SO₂ and/or NO_x and/or opacity in lieu of submitting the written reports required

under paragraphs (b) and (h) of this section.

The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format.

44 FR 33613, June 11, 1979, as amended at 63 FR 49454, Sept. 16, 1998; 64 FR 7464, Feb. 12, 1999]



APPENDIX B
ACID RAIN PERMIT APPLICATION





Phase II 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.

Plant Name	WYGEN	State	WY	ORIS Code	55479
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a Unit ID#	Compliance Plan		d New Units Commence Operation Date	e New Units Monitor Certification Deadline
	b Unit Will Hold Allow- ances in Accordance with 40 CFR 72.9(c)(1)	c Repowering Plan		

STEP 2
Enter the unit ID#
for each affected
unit, and indicate
whether a unit is
being repowered
and the repowering
plan being renewed
by entering "yes" or
"no" at column c. For
new units, enter the
requested information
in columns d and e.

001	Yes	NO	7-1-03	10-1-03
	Yes			

STEP 3
Check the box if the
response in column c
of Step 2 is "Yes"
for any unit.

- For each unit that is being repowered, the Repowering Extension Plan form is included.

STEP 4
Read the standard requirements and certification, enter the name of the designated representative, and sign and date

Standard Requirements

Permit Requirements.

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

Monitoring Requirements.

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

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) 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, 72.8, or 72.14 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

(2) Designated representative of an affected source and 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.

Plant Name (from Step 1) WYGEN

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, 72.8, or 72.14, 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.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative.
- (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, 72.8, or 72.14 shall be construed as:

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

Certification

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	<u>Tom Ormachea</u>	
Signature	<u>[Signature]</u>	Date <u>2-2-01</u>

