Colorado Department of Public Health and Environment

OPERATING PERMIT

Public Service Company of Colorado – Hayden Station

First Issued: May 1, 2001
Renewed: April 1, 2009
Last Revised: December 4, 2012

AIR POLLUTION CONTROL DIVISION
COLORADO OPERATING PERMIT

FACILITY NAME: Hayden Station

FACILITY ID: 1070001

RENEWED: April 1, 2009
EXPIRATION DATE: April 1, 2014
MODIFICATIONS: See Appendix F of Permit

OPERATING PERMIT NUMBER

96OPRO132

Issued in accordance with the provisions of Colorado Air Pollution Prevention and Control Act, 25-7-101 et seq. and applicable rules and regulations.

ISSUED TO:

Public Service Company of Colorado
1800 Larimer Street, Suite 1300
Denver, CO 80202

PLANT SITE LOCATION:

13125 U.S. Highway 40
Hayden, CO 81639
Routt County

INFORMATION RELIED UPON
Operating Permit Renewal Application
Received: April 1, 2005

And Additional Information Received: September 13, 2007, September 23 and November 6, 2008

Nature of Business: Coal-Fired Electric Generating Station
Primary SIC: 4911

RESPONSIBLE OFFICIAL
Name: George Hess
Title: General Manager – Power Generation, Colorado
Phone: (303) 571-7282

FACILITY CONTACT PERSON
Name: Gary Magno
Title: Manager, Environmental Services - Air Quality Compliance
Phone: (303) 294-2177

SUBMITTAL DEADLINES
Semi-Annual Monitoring Periods: April 1 – September 30, October 1 – March 31
Semi-Annual Monitoring Report: Due on November 1, 2009 & May 1, 2010 & subsequent years
Annual Compliance Period: April 1 – March 31
Annual Compliance Certification: Due on May 1, 2010 & subsequent years

Note that the Semi-Annual Monitoring Reports and Annual Compliance Certifications must be received at the Division office by 5:00 p.m. on the due date. Postmarked dates will not be accepted for the purposes of determining the timely receipt of those reports/certifications.

FOR ACID RAIN SUBMITTAL DEADLINES SEE SECTION III.4 OF THIS PERMIT

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SECTION I - General Activities and Summary

1. Permitted Activities

1.1 This source is classified as an electrical services facility under Standard Industrial Classification 4911. This facility consists of two coal fired boilers. Unit 1 is rated at 205 MW and Unit 2 is rated at 300 MW. The Unit 1 ignitors utilize either natural gas or No. 2 fuel oil and the Unit 2 ignitors utilize No. 2 fuel oil for startup, shutdown and/or flame stabilization. As part of a Consent Decree, entered by the United States District Court on August 19, 1996, Civil Action 93-B-1749, the following emission control devices were required to be installed on both Units 1 and 2: low NO_X burners with over-fire air (to control NO_X emissions), lime spray dryers (to control SO_2 emissions) and fabric filter dust collectors (to control PM emissions). The Consent Decree required that startup testing of the control devices on Unit 1 commence by December 31, 1998 and that startup testing of the control devices on Unit 2 commence by December 31, 1999. As of October 18, 1999 all control equipment required by the Consent Decree had been placed into service.

In August 1996 the Colorado Air Quality Control Commission (AQCC) adopted revisions to Colorado's Visibility State Implementation Plan (SIP), specified in a document entitled "Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements", dated August 15, 1996. The U.S. EPA approved the Visibility SIP revisions at 62 Federal Register 2305 (January 16, 1997). These revisions, concerning the Hayden Station, implemented and enforced requirements identified in the Hayden Consent Decree. Only those provisions of the Consent Decree that dealt with visibility impairment (SO_2 and opacity) were included in the Visibility SIP revisions.

In addition to the coal fired boilers, other significant sources of emissions at this facility include fugitive emissions from coal handling, ash handling and disposal and vehicle traffic on paved and unpaved roads. Point source emissions of particulate matter include coal crushing and conveying, an ash storage silo, two (2) ash recycle silos (recycle ash used with lime in the spray dryer), two (2) lime storage silos, two (2) ball mill slakers (prepares lime slurry for spray dryer) and two (2) recycle mixers (prepares recycle as slurry for spray dryer). Additional emission units at this facility include two (2) cooling towers.

Construction of a new rail car unloader, associated conveyor and lowering well to distribute coal to the pile is expected to begin in April 2010. As part of this project, two new crushers will be installed under the existing reclaim feeders that will discharge onto the existing reclaim conveyors to Units 1 and 2. The existing truck unloading system, crushers, conveyors and existing stacking missiles will be removed from service and demolished prior to startup of the new equipment.

This facility is located four miles east of Hayden at 13125 U.S. Highway 40, in Routt County. The area in which the plant operates is designated as attainment for all criteria pollutants.

Wyoming, an affected state, is within 50 miles of the plant. Flattops and Mt. Zirkel National Wilderness Areas, federal class I designated areas, are within 100 km of this facility.

1.2 Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air pollutants from this facility in accordance with the requirements, limitations, and conditions of this permit.

1.3 The Operating Permit incorporates the applicable requirements contained in the underlying construction permits, and does not affect those applicable requirements, except as modified during review of the application or as modified subsequent to permit issuance using the modification procedures found in Regulation No. 3, Part C. These Part C procedures meet all applicable substantive New Source Review requirements of Part B. Any revisions made using the provisions of Regulation No. 3, Part C shall become new applicable requirements for purposes of this Operating Permit and shall survive reissuance. Any requirements that were designated in the federal Consent Decree (Civil Action 93-B-1749) as applicable requirements have been incorporated into this operating permit through approved streamlining procedures and shall survive reissuance as applicable requirements. This permit incorporates the applicable requirements (except as noted in Section II) from the following construction permits: 10RO173, 13RO598, 83RO246F, 96RO551-2, 98RO374, 98RO375, 98RO376 and 98RO377.

1.4 All conditions in this permit are enforceable by US Environmental Protection Agency, Colorado Air Pollution Control Division (hereinafter Division) and its agents, and citizens unless otherwise specified. **State-only enforceable conditions are:** Permit Condition Number(s): Section II – Condition 1.19 (Mercury) and Section V - Conditions 3.g (last paragraph), 14 and 18 (as noted).

1.5 All information gathered pursuant to the requirements of this permit is subject to the Recordkeeping and Reporting requirements listed under Condition 22 of the General Conditions in Section V of this permit. Either electronic or hard copy records are acceptable.

2. Alternative Operating Scenarios

2.1 The permittee shall be allowed to make the following changes to its method of operation without applying for a revision of this permit.

2.1.1 The facility may use the following fuels for startup and flame stabilization:

2.1.1.1 Boiler No. 1 may use natural gas, No. 2 fuel oil or combination as specified under Section II.

2.1.1.2 Boiler No. 2 may use No. 2 fuel oil as specified under Section II.

2.1.2 Evaporation of chemical cleaning solutions may be performed in Boilers No. 1 and No. 2 under the following conditions:

2.1.2.1 All air pollution control equipment shall be in operation during

evaporation of cleaning solutions.

2.1.2.2 The permittee shall retain records, on site, of each cleaning event. These records shall include the date and time the event begins and ends and the amounts and types of solutions used in the cleaning event.

2.2 The facility must, contemporaneously with making a change from one operating scenario to another, maintain records at the facility of the scenario under which it is operating (Colorado Regulation No. 3, Part A, Section IV.A.1). Either electronic or hard copy records are acceptable.

3. Prevention Of Significant Deterioration (PSD)

3.1 This facility is a major stationary source (potential to emit of any criteria pollutant $\geq$ 100 tpy) for the purposes of Prevention of Significant Deterioration (PSD) requirements (Colorado Regulation 3, Part D, Section VI). Future modifications to this facility resulting in a significant net emissions increase (see Reg 3, Part D, Section II.A.26 and 42) for any pollutant as listed in Regulation No. 3, Part D, Section II.A.42, or are major by themselves will result in the application of the PSD review requirements.

3.2 There are no other Operating Permits associated with this facility for purposes of determining applicability of Prevention of Significant Deterioration regulations.

4. Accidental Release Prevention Program (112(r))

4.1 Based upon the information provided by the applicant, this facility is not subject to the provisions of the Accidental Release Prevention Program (section 112(r) of the Federal Clean Air Act).

5. Compliance Assurance Monitoring (CAM)

5.1 The following emission points at this facility use a control device to achieve compliance with an emission limitation or standard to which they are subject and have pre-control emissions that exceed or are equivalent to the major source threshold. They are therefore subject to the provisions of the CAM program as set forth in 40 CFR Part 64, as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV:

Units B001 and B002 - Boilers

See Section II, Condition 1.18 for compliance assurance monitoring requirements.

6. Summary of Emission Units

6.1 The emissions units regulated by this permit are the following:

Emission Unit No./ Facility ID	AIRS Stack No.	Description	Startup Date	Pollution Control Device
B001	001	Boiler No. 1, Riley-Stoker, Model No. 2489, Serial No. 3447, Front-Fired Boiler, Rated at 1,963 MMBtu/hr. Coal-Fired, with Natural Gas and No. 2 Fuel Oil Used for Startup, Shutdown and/or Flame Stabilization.	July 1965 Baghouse, Low NO_X burners and Lime Spray Dryer commenced operation December 1998.	**For PM -** Baghouse [Utility Engineering Reverse Air] , **For NO_X -** Low NO_X Burners with Over-Fire Air [Babcock and Wilcox XCL with Babcock and Wilcox NO_X Ports], and **For SO2 -** Lime Spray Dryer [Babcock and Wilcox with Two (2) Niro F800 Atomizers]
B002	002	Boiler No. 2, Combustion Engineering, Model and Serial No. 1337, Tangentially Fired Boiler, Rated at 2,712 MMBtu/hr. Coal-Fired with No. 2 Fuel Oil Used for Startup, Shutdown and/or Flame Stabilization.	1976 Baghouse and Low NO_X burners commenced operation May 1999. Lime Spray Dryer commenced operation October 1999.	**For PM -** Baghouse [Utility Engineering Reverse Air] **For NO_X -** Low NO_X Burners with Over-Fire Air [ABB/Combustion Engineering Low NO_X Concentric Firing System Level III], and **For SO_2 -** Lime Spray Dryers [Babcock and Wilcox with Two (2) Niro F800 Atomizers]
F001	008	Fugitive Particulate Emissions from Coal Handling and Storage (Coal Unloading, Storage Pile and Coal Dozing) **Note that the truck unloading system, associated conveyors and existing stacking missiles will be removed prior to startup of the new rail car unloader.**	1965	Uncontrolled
F002	006/ 007	Fugitive Particulate Emissions from Ash Handling and Disposal	1965 Disposal pit – 1983	Fugitive Particulate Emission Control Plan
F003	010	Fugitive Particulate Emissions from Paved and Unpaved Roads	1962	Uncontrolled
F004	008	New Rail Car Unloader, Associated Conveyor and Lowering Well	Construction expected to begin April 2010.	Rail Car Unloader is Enclosed on 3 Sides (Roof and 2 Sides), Associated Conveyor is Covered and Dust Suppression Used at Unloader and Associated Conveyor.

Emission Unit No./ Facility ID	AIRS Stack No.	Description	Startup Date	Pollution Control Device
P001	005	Ash Silo	1974	Baghouse
P002	008	Coal Handling System (Conveying and Crushing) **Note that the existing crushers will be removed prior to startup of the new crushers.**	Unit 1 – 1965 Unit 2 – 1976 (commenced construction 1973)	Enclosed - Conveyors Covered and Crushers in Buildings
P003	016	Two (2) Recycle Ash Silos	December 1998	Each with Industrial Accessories Company Model 54234-202-1 Baghouses
P004	017	Two (2) Recycle Mixers	December 1998	Each with Custom-Built Chemco Scrubbers with Blowers Rated at 200 acfm
P005	014	Two (2) Lime Silos	December 1998	Each with a Dust Control Equipment, Model VS20KS5 Baghouse, Serial Nos. 97-1367/01 & 02
P006	015	Two (2) Ball Mill Slakers	December 1998	Each with Custom-Built Chemco Scrubbers with Blowers Rated at 500 acfm
P007	008	Two (2) New Crushers	Construction expected to begin in April 2010.	Crushers are Enclosed and Located in Underground Tunnel
M001	011	Cooling Tower for Unit No. 1, Rated at 84,000 GPM	1965	Drift Eliminators
M002	012	Cooling Tower for Unit No. 2 - Rated at 134,000 GPM	1976	Drift Eliminators
B003	N/A	Kewanee Wet-Back Scotch Boiler, Type LW-892-01, Serial No. 9367, Rated at 25 MMBtu/hr. Natural Gas and No. 2 Fuel Oil-Fired.	1973	Uncontrolled

SECTION II - Specific Permit Terms

1. B001 & B002 - Boilers No. 1 and No. 2, Coal Fired

Boiler No. 1 is Rated at 1,963 MMBtu/hr and Boiler No. 2 is Rated at 2,712 MMBtu/hr

Unless otherwise specified the requirements apply to each boiler

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
Particulate Matter (PM)	1.1	0.03 lbs/MMBtu		N/A	Baghouse Maintenance and Source Testing	See Condition 1.1.
Particulate Matter (PM and PM_{10}) - Emission Calculations	1.2.	N/A	N/A	**Unit 1:** PM = 0.006 lbs/MMBtu **Unit 2:** PM = 0.004 lbs/MMBtu	Calculation and Recordkeeping	Annually
				Units 1 & 2: PM_{10} = 0.92 (PM)		
SO_2	1.3.	1.2 lbs/MMBtu, on a 3-Hour Rolling Average		N/A	Continuous Emission Monitor	Continuously
		0.160 lbs/MMBtu, on a 30-Boiler Operating Day Rolling Average Basis				
		0.130 lbs/MMBtu, on a 90-Boiler Operating Day Rolling Average Basis				
		82% Reduction of SO_2 Emissions, on a 30-Boiler Operating Day Rolling Average Basis				
Unit 2 NO_X	1.4.	0.70 lbs/MMBtu, on a 3-Hour Rolling Average		N/A	Continuous Emission Monitor	Continuously
Emission Calculations	1.5.	N/A	N/A	SO_2 CEM NO_X CEM CO 0.50 lbs/ton VOC 0.06 lbs/ton	Recordkeeping and Calculation	Annually
Fuel Usage	1.6.	N/A	N/A	N/A	Recordkeeping	Annually
Fuel Sampling	1.7.	N/A	N/A	N/A	ASTM Methods	See Condition 1.7.

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
Unit 2 Only - NSPS Subpart A General Provisions	1.8.	N/A	N/A	N/A	As Required by NSPS General Provisions	Subject to NSPS General Provisions
Continuous Emission Monitoring Requirements	1.9.	N/A	N/A	N/A	See Condition 1.9.	
Special Requirements for SO_2 Continuous Emission Monitor	1.10.	N/A	N/A	N/A	See Condition 1.10.	
Operation of SO_2 Control Equipment	1.11.	Units May Not be Operated for More Than 72 Consecutive Hours Without an SO_2 Control System Achieving Some SO_2 Reduction		N/A	Continuous Emission Monitor	Continuously
Lead (Pb)	1.12.	N/A	N/A	See Condition 1.12	Recordkeeping and Calculation	Annually
Opacity	1.13.	Not to Exceed 20.0% Except as provided for in 1.14 Below		N/A	Continuous Opacity Monitor	Continuous, Six Minute Intervals
Opacity	1.14.	For Certain Operational Activities - Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in Any 60 Consecutive Minutes		N/A	Continuous Opacity Monitor	Continuous, Six Minute Intervals
NSPS Opacity - **Unit 2 Only**	1.15.	Not to Exceed 20% Except for One Six Minute Average Not to Exceed 27% Per Hour		N/A	Continuous Opacity Monitor	Continuous, Six Minute Intervals
Operational Requirements	1.16.	N/A	N/A	N/A	See Condition 1.16.	
Acid Rain Requirements	1.17.	See Section III of this Permit			Certification	Annually
Compliance Assurance Monitoring Requirements	1.18	See Condition 1.18			See Condition 1.18	
Mercury (Hg) **State Only**	1.19	Low Emitter (LE) Hg no more than 29 lbs/yr		N/A	Performance Test	Annual or Semi-Annual Depending on Results

Parameter	Permit Condition Number	Limitations Short Term Long Term	Compliance Emission Factor	Monitoring Method	Interval
Regional Haze Requirements	1.20	**PM:** 0.03 lb/MMBtu	N/A	Baghouse Maintenance, Source Testing and CAM	See Condition 1.20
		SO_2: 0.13 lb/MMBtu, on a 30-day rolling averge		Continuous Emission Monitor	Continuously
		NO_X: Unit 1 – 0.08 lb/MMBtu, on a 30-day rolling average Unit 2 – 0.07 lb/MMBtu, on a 30-day rolling average			

1.1 Particulate Matter (PM) emissions, **from each unit**, shall not exceed the limitation stated above (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.c.ii.(2)). Compliance with this standard shall be demonstrated by the following:

1.1.1 Maintaining and Operating the baghouse in accordance with the requirements identified in Condition 11.1.

1.1.2 Conducting performance tests annually in accordance with Condition 11.3. Note that compliance is monitored based on the average of three, 2-hour tests described in Condition 11.3.

During each of the performance tests conducted as required by this condition, a baseline opacity limit shall be established for the compliance assurance monitoring (CAM) requirements specified in Condition 1.18. The value of the baseline opacity level is determined by averaging all of the 6-minute average opacity values (reported to the nearest 0.1 percent opacity) from the COMS measurement recorded during each of the test run intervals conducted for the performance test, and then adding the appropriate percent opacity (see table below) to the calculated average value for all of the test runs.

Results of PM performance test	Opacity to add-on
Less than or equal to 50% of the PM standard	5.0 %
Greater than 50% but less than or equal to 75 % of the PM standard	3.5 %
Greater than 75% of the PM standard	2.5 %

If the calculated average opacity value (COMS average plus add-on) for all of the test runs is less than 5.0 percent, then the opacity baseline level is set at 5.0 percent.

Initial performance tests were conducted in June 2009 and the baseline opacity level has been set at the levels specified in Condition 1.18.1.2.

The permittee shall submit the proposed baseline opacity determined from any subsequent performance tests for Division approval and begin monitoring under the new baseline within 45 calendar days of the test. The proposed baseline opacity submittal shall include the justification and supporting data for the proposed baseline opacity and any add-on values (e.g., 2.5% or 5.0% as indicated above). In addition, the permittee shall submit with the proposed baseline opacity a minor modification application to revise the permit to incorporate the proposed baseline opacity as the indicator range for the 24-hr average opacity.

1.1.3 Following the compliance assurance monitoring requirements specified in Condition 1.18.

1.1.4 Upon the compliance deadline for the PM emission limitations in Condition 1.20.1.1 (Regional Haze PM limits), compliance with the PM emission limitation in Condition 1.1 shall, in the absence of credible evidence to the contrary, be presumed as long as the monitoring conducted in accordance with the requirements in Condition 1.20.3 (Regional Haze PM monitoring) indicates compliance with the PM emission limitations in Condition 1.20.1.1 (Regional Haze PM limits).

1.2 Annual emissions of PM and PM_{10}, **from each unit**, will be determined, for the purposes of APEN reporting and payment of annual fees, using the emission factor for PM determined from the most recent source testing required in Condition 1.1 and the annual average heat input to the unit in the following equation:

PM: $$\text{Tons/yr} = \frac{[\text{EF (lbs/MMBtu) x heat input from coal (MMBtu/yr)}]}{\text{2000 lbs/ton}}$$

PM_{10}: Tons/yr = 0.92 x (Annual Emissions of PM)

The annual heat input to the boiler, from coal, shall be determined using the annual coal consumption and the average heat content of the coal, as determined by the required fuel sampling in Condition 1.7.

1.3 Sulfur Dioxide (SO_2) emissions, **from each unit**, shall not exceed the following limitations:

1.3.1 Sulfur Dioxide (SO_2) emissions, **from each unit**, shall not exceed 1.2 lbs/MMBtu on a 3 hour rolling average (Colorado Regulation No. 1, Section VI.A.3.a.(ii) and VI.A.1).

1.3.2 Sulfur Dioxide (SO_2) emissions, **from each unit**, shall not exceed 0.160 lbs/MMBtu, on a 30-boiler operating day rolling average basis (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.a.ii.(1)).

1.3.3 Sulfur Dioxide (SO_2) emissions, **from each unit**, shall not exceed 0.130 lbs/MMBtu, on a 90-boiler operating day rolling average basis (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.a.ii.(2)).

1.3.4 Sulfur Dioxide (SO_2) emissions, **from each unit**, shall be reduced by 82%, on a 30-boiler operating day rolling average basis (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.a.iv).

"Boiler Operating Day" and "Rolling Average Basis" in Conditions 1.3.2 thru 1.3.4 above have the meanings as defined in Condition 7 of this permit.

Compliance with Condition 1.3.1. shall be monitored using the continuous emission monitors (CEMs) required by Condition 1.9.

Compliance with Conditions 1.3.2 thru 1.3.4 shall be monitored as follows:

1.3.5 Compliance with Conditions 1.3.2 and 1.3.3 shall be monitored using the SO_2 CEMs required by Condition 1.9 (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.a.iii).

1.3.6 Compliance with Condition 1.3.4 shall be monitored by comparing the SO_2 concentrations (measured in lbs/MMBtu) measured by the inlet (to spray dryer) SO_2 CEMs and the outlet (at the stack) SO_2 CEMs to determine the percentage reduction in SO_2 emissions (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.a.v).

1.3.7 The first two hours after the first coal feeder on a unit has started during startup shall be excluded from the calculation of that day's SO_2 emissions for that unit (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.a.vi).

1.3.8 Emissions of SO_2 as a result of a "catastrophic failure" may be excluded from the calculations of that day's SO_2 emissions for that unit pursuant to the requirements in Condition 9 of this permit.

1.3.9 During any boiler operating day (defined in Condition 7), all emissions of SO_2 from the stack of any unit shall be included in the determination of the permittee's compliance with the SO_2 emission limitations, unless excluded under the provisions of Conditions 1.3.7 or 1.3.8 (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.a.viii).

1.4 Nitrogen Oxide (NO_X) emissions **from Unit 2** shall not exceed 0.70 lbs/MMBtu, on a 3-hour rolling average (40 CFR Part 60 Subpart D § 60.44(a)(3), as adopted by reference in Colorado Regulation No. 6, Part A). Compliance with the NO_X emission limits shall be monitored using the continuous emission monitors (CEMs) required by Condition 1.9.

Note that the NO_X emission limits are not applicable during times of startup, shutdown and malfunction. However, those instances during startup, shutdown and malfunction when the NO_X limitation is exceeded shall be identified in the Excess Emission Report required in Condition 12.6.

1.5 The emission factors listed above have been approved by the Division and shall be used to calculate emissions (EPA's Compilation of Emission Factors (AP-42), dated September 1998, Section 1.1). Annual emissions, **from each unit**, shall be calculated, for the purposes of APEN reporting and the payment of annual fees, using the above emission factors and the annual fuel usage, as required by Condition 1.6, in the following equation:

$$\text{Tons/yr} = \frac{[\text{EF (lbs/ton) x annual fuel usage (tons/yr)}]}{2000 \text{ lbs/ton}}$$

Annual emissions of SO_2 and NO_X shall be determined from the Continuous Emission Monitors (CEMs) required by Condition 1.9.

1.6 Fuel Usage shall be recorded annually and maintained to be made available to the Division upon request. Fuel usage shall be determined using belt scales and corporate records as necessary.

1.7 Coal shall be sampled in accordance with the requirements identified in Condition 15. Vendor and/or station sample results from all coal shipments shall be used to determine the average heat, moisture, sulfur and ash content of the fuel used in monitoring compliance with permit conditions.

1.8 **Unit 2 Only** is subject to the requirements in 40 CFR Part 60 Subpart A - General Provisions, as adopted by reference in Colorado Regulation No. 6, Part A. Specifically, this unit is subject to the requirements in Condition 10.

1.9 **For each unit**, the source shall install, certify and operate continuous emission monitoring (CEM) equipment for measuring opacity, SO_2 (at the inlet to the spray dryer and outlet at stack), NO_X, CO_2, and volumetric flow (40 CFR Part 75 and Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.9). The CEM systems shall meet the requirements in Condition 12.

1.10 The coal feeders on each unit shall be tied into the SO_2 continuous emission monitoring systems (CEMS) such that the CEMS accurately reflect the date and time when the first coal feeder on each unit has started during each startup (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.12.b).

1.11 In no event shall the permittee operate either unit for more than 72 consecutive hours without an SO_2 control system achieving some reduction of SO_2 emissions at that unit. Following shutdown (the cessation of operation of a unit for any purpose or reason), the permittee shall only restart the boiler on a unit when any malfunctioning control equipment has been repaired (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.a.vii). Compliance with the requirement shall be monitored using the continuous emission monitors (CEMs) required by Condition 1.9.

1.12 For the purposes of APEN reporting and the payment of fees, annual emissions of lead shall be calculated as required by Condition 14..

1.13 Compliance with this standard (identified in Condition 13.1.1) shall be monitored in accordance with the requirements in Condition 13.1.

1.14 Compliance with this standard (identified in Condition 13.1.2) shall be monitored in accordance with the requirements in Condition 13.1.

1.15 **For Unit 2 Only -** Compliance with this standard shall be monitored in accordance with the requirements in Condition 13.3.

1.16 The permittee shall, at all times, maintain and optimally operate the boilers and all pollution control equipment installed consistent with good air pollution control practices for minimizing emissions. Without limitation, this shall include returning the control equipment to optimum efficiency as soon as practicable during boiler startup or following control equipment outage or impairment, and maintaining the control equipment at optimum efficiency as long as possible while shutting down the boiler (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.7).

1.17 These units are subject to the Title IV Acid Rain Requirements. As specified in 40 CFR Part 72.72(b)(1)(viii), the acid rain permit requirements shall be a complete and segregable portion of the Operating Permit. As such the requirements are found in Section III of this permit.

1.18 The Compliance Assurance Monitoring (CAM) requirements in 40 CFR Part 64, as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV, apply to Boiler 1 (Unit 1) and Boiler 2 (Unit 2) with respect to the particulate matter limitations identified in Condition 1.1 as follows:

1.18.1 The permittee shall follow the CAM Plan provided in Appendix G of this permit. Excursions, for purposes of reporting are as follows:

1.18.1.1 An opacity value greater than 15% occurring for 60 seconds; or

1.18.1.2 Any 24-hour period in which the average opacity exceeds the baseline level established by the performance test required by Condition 1.1.2 and/or 1.20.3.2; or

The baseline opacities set by the June 2009 performance tests required by Condition 1.1.2 are as follows: Unit 1 – 7.2% and Unit 2 – 6.2%. These values serve as the baseline opacity until the next required performance test as specified in Condition 1.1.2 and/or 1.20.3.2.

1.18.1.3 Failure to perform the semi-annual internal baghouse inspection within 60 days of the scheduled completion date.

Excursions shall be reported as required by Section V, Conditions 21 and 22.d of this permit.

1.18.2 Operation of Approved Monitoring

1.18.2.1 At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment (40 CFR Part 64 § 64.7(b), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.18.2.2 Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of these CAM requirements, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the

control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions (40 CFR Part 64 § 64.7(c), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.18.2.3 Response to excursions or exceedances

a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable (40 CFR Part 64 § 64.7(d)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

b. Determination of whether the owner of operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process (40 CFR Part 64 § 64.7(d)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.18.2.4 After approval of the monitoring required under the CAM requirements, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the Division and, if necessary submit a proposed modification for this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to,

reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters (40 CFR Part 64 § 64.7(e), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.18.3 Quality Improvement Plan (QIP) Requirements

1.18.3.1 Based on the results of a determination made under the provisions of Condition 1.18.2.3.b, the Division may require the owner or operator to develop and implement a QIP (40 CFR Part 64 § 64.8(a), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.18.3.2 The owner or operator shall maintain a written QIP, if required, and have it available for inspection (40 CFR Part 64 § 64.8(b)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.18.3.3 The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:

a. Improved preventative maintenance practices (40 CFR Part 64 § 64.8(b)(2)(i), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

b. Process operation changes (40 CFR Part 64 § 64.8(b)(2)(ii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

c. Appropriate improvements to control methods (40 CFR Part 64 § 64.8(b)(2)(iii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

d. Other steps appropriate to correct control performance (40 CFR Part 64 § 64.8(b)(2)(iv), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

e. More frequent or improved monitoring (only in conjunction with one or more steps under Conditions 1.18.3.3.a through d above) (40 CFR Part 64 § 64.8(b)(2)(v), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.18.3.4 If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Division if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined (40 CFR Part 64 § 64.8(c), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.18.3.5 Following implementation of a QIP, upon any subsequent determination pursuant to Condition 1.18.2.3.b, the Division or the U.S. EPA may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:

a. Failed to address the cause of the control device performance problems (40 CFR Part 64 § 64.8(d)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV); or

b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions (40 CFR Part 64 § 64.8(d)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.18.3.6 Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the federal clean air act (40 CFR Part 64 § 64.8(e), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.18.4 Reporting and Recordkeeping Requirements

1.18.4.1 Reporting Requirements: The reports required by Section V, Condition 22.d, shall contain the information specified in Appendix B of the permit and the following information, as applicable:

a. Summary information on the number, duration and cause (including unknown cause, if applicable), for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable) ((40 CFR Part 64 § 64.9(a)(2)(ii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV); and

b. The owner or operator shall submit, if necessary, a description of the actions taken to implement a QIP during the reporting period as specified in Condition 1.18.3 of this permit. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring (40 CFR Part 64 § 64.9(a)(2)(iii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.18.4.2 General Recordkeeping Requirements: In addition to the recordkeeping requirements in Section V, Condition 22.a through c.

a. The owner or operator shall maintain records of any written QIP required pursuant to Condition 1.18.3 and any activities undertaken to implement a QIP, and any supporting information required to be maintained under these CAM requirements (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions) (40 CFR Part 64 § 64.9(b)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements (40 CFR Part 64 § 64.9(b)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.18.5 Savings Provisions

1.18.5.1 Nothing in these CAM requirements shall excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the federal clean air act. These CAM requirements shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purposes of determining the monitoring to be imposed under separate authority under the federal clean air act, including monitoring in permits issued pursuant to title I of the federal clean air act. The purpose of the CAM requirements is to require, as part of the issuance of this Title V operating permit, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of CAM (40 CFR Part 64 § 64.10(a)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.18.5.2 Nothing in these CAM requirements shall restrict or abrogate the authority of the U.S. EPA or the Division to impose additional or more stringent monitoring, recordkeeping, testing or reporting requirements on any owner or operator of a source under any provision of the federal clean air act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable (40 CFR Part 64 § 64.10(a)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.18.5.3 Nothing in these CAM requirements shall restrict or abrogate the authority of the U.S. EPA or the Division to take any enforcement action under the

federal clean air act for any violation of an applicable requirement or of any person to take action under section 304 of the federal clean air act (40 CFR Part 64 § 64.10(a)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

1.19 **State-Only Requirement:** Units 1 and 2 are subject to the Standards of Performance for Coal-Fired Electric Steam Generating Units in Colorado Regulation No. 6, Part G, Section VIII, as follows"

1.19.1 Units 1 and 2 are currently considered Low Emitters (LEs), since actual emissions from each unit are no more than 29 pounds per year of mercury. Each unit shall be routinely tested to verify LE status as follows (Colorado Regulation No. 6, Part B, Section VIII.B.10)

1.19.1.1 If actual emissions are less than 14 pounds of mercury per year, the source shall conduct performance testing on the unit annually using Division-approved methodology.

1.19.1.2 If actual emissions are greater than 14 pounds but less than or equal to 29 pound of mercury per year, the source shall conduct performance testing on the unit every six months using Division-approved methodology.

1.19.2 The source shall submit written quarterly reports to the Division within 30 days of the end of each calendar quarter. The quarterly reports required shall include the unit's operating hours and lbs/yr of mercury emitted for each calendar quarter. Within 30 days of the end of each calendar year, the source shall also report the pounds of mercury emitted for the prior year. (Colorado Regulation No. 6, Part B, Section VIII.E.3.c and d).

1.20 These units are subject to the following Regional Haze Requirements:

1.20.1 Emission Limitations (Colorado Regulation No. 3, Part F, Section VI.A.2)

1.20.1.1 PM emissions **from each unit** shall not exceed 0.03 lb/MMBtu.

1.20.1.2 SO_2 emissions **from each unit** shall not exceed 0.13 lb/MMBtu, on a 30-day rolling average basis.

1.20.1.3 NO_X emissions shall not exceed the following limitations:

a. For **Unit 1**, NO_X emissions shall not exceed 0.08 lb/MMBtu, on a 30-day rolling average basis.

b. For **Unit 2**, NO_X emissions shall not exceed 0.07 lb/MMBtu, on a 30-day rolling average basis.

1.20.2 Compliance Date

1.20.2.1 The permittee must comply with the above limits and averaging times as

expeditiously as practicable, but in no event later than five years after EPA approval of Colorado's state implementation plan for regional haze, or relevant component thereof. The permittee must maintain control equipment or operational practices required to comply with the above limits and averaging times, and establish procedures to ensure that such equipment or operational practices are properly operated and maintained. (Colorado Regulation No. 3, Part F, Section IV.A.3)

1.20.2.2 The permittee shall submit to the Division a proposed compliance schedule within sixty days after EPA approves the BART portion of the Regional Haze SIP. The Division shall publish these proposed schedules and provide for a thirty-day public comment period following publication. The Division shall publish its final determinations regarding the proposed schedules for compliance within sixty days after the close of the public comment period and will respond to all public comments received. (Colorado Regulation No. 3, Part F, Section IV.A.4)

1.20.3 PM Monitoring

1.20.3.1 Unless particulate compliance testing was completed within the previous 6 months, within 60 days of the compliance deadline specified in Condition 1.20.2 of this permit, the owner/operator shall conduct a stack test to measure particulate emissions in accordance with the requirements and procedures set forth in EPA Test Method 5 as set forth in 40 CFR Part 60, Appendix A. Stack testing for particulate matter shall be performed annually, except that: (1) if any test results indicate emissions are less than or equal to 50% of the emission limit, another test is required within five years; (2) if any test results indicate emissions are more than 50%, but less than or equal to 75% of the emission limit, another test is required within three years; and (3) if any test results indicate emissions are greater than 75% of the emission limit, an annual test is required until the provisions of (1) or (2) are met. A test run shall consist of three test runs, with each run at least 120 minutes in duration. Test results shall be converted to the applicable units and compliance will be based on the average of the three test runs. (Colorado Regulation No. 3, Part F, Section VII.C)

1.20.3.2 During each of the performance tests conducted as required Condition 1.20.3.1, a baseline opacity limit shall be established for the CAM requirements specified in Condition 1.18. The value of the baseline opacity level is determined by averaging all of the 6-minute average opacity values (reported to the nearest 0.1 percent opacity) from the COMS measurement recorded during each of the test run intervals conducted for the performance test, and then adding the appropriate percent opacity (see table below) to the calculated average value for all of the test runs.

Results of PM performance test	Opacity to add-on
Less than or equal to 50% of the PM standard	3.5 %
Greater than 50% of the PM standard	2.5 %

If the calculated opacity value (COMS average plus add-on) is less than 5.0 percent, then the opacity baseline level is set at 5.0 percent.

The permittee shall submit the proposed baseline opacity determined from the initial test and any subsequent performance tests required by Condition 1.20.3.1 for Division approval and begin monitoring under the new baseline within 45 calendar days of the test. The proposed baseline opacity submittal shall include the justification and supporting data for the proposed baseline opacity and any add-on values (e.g., 2.5% or 3.5% as indicated above). In addition, the permittee shall submit with the proposed baseline opacity a minor modification application to revise the permit to incorporate the proposed baseline opacity as the indicator range for the 24-hr average opacity.

1.20.3.3 In addition, to the stack tests described in Condition 1.20.3.1, the owner/operator shall monitor compliance with the particulate matter limits in accordance with the applicable compliance assurance monitoring plan developed and approved in accordance with 40 CFR Part 64. (Colorado Regulation No. 3, Part F, Section VII.C) The compliance assurance monitoring requirements are specified in Condition 1.18 of this permit and the compliance assurance monitoring plan is included in Appendix G of this permit.

1.20.4 SO_2 and NO_X Monitoring

1.20.4.1 The owner or operator of a boiler subject to this section shall comply with the Part 75 monitoring and recordkeeping requirements as specified in Condition 12 of this permit with the exception of the CEMS data substitution and bias adjustment requirements.

At all times after the compliance deadline specified in Condition 1.20.2 of this permit, the owner/operator of each BART, RP, or BART alternative program unit shall maintain, calibrate, and operate a CEMS, in full compliance with the requirements found at 40 CFR Part 75 not excluded above, to accurately measure from such unit SO_2, NO_X, diluent, and stack gas volumetric flow rate as such parameters are relevant to the applicable emission limit. The CEMS shall be used to determine compliance with the SO_2 and NO_X Regional Haze emission limits for each such unit. Such limits are expressed in units of pounds per million Btu. The owner/operator shall calculate emissions in the applicable units.

In determining compliance with the SO_2 and NO_X Regional Haze limits, all periods of emissions shall be included, including startups, shutdowns, emergencies, and malfunction.

(Colorado Regulation No. 3, Part F, Section VII.B.1.a)

1.20.4.2 For any hour in which fuel is combusted in the BART, RP, or BART alternative program unit, the owner/operator shall calculate hourly average SO_2 and NO_X concentrations in pounds per million Btu at the CEMS in accordance with the requirements of 40 CFR Part 75 except for Part 75 requirements excluded by Section VII.B.1.a. These hourly averages shall then be used to determine compliance in accordance with the particular limit's averaging period, as follows (Colorado Regulation No. 3, Part F, Section VII.B.1.a.(i)(1)):

1.20.4.3 Regional Haze limits with a 30-day averaging period: Before the end of each operating day, the owner/operator shall calculate and record the 30-day rolling average emission rate in lb/MMBtu from all valid hourly emission values from the CEMS for the previous 30 operating days. (Colorado Regulation No. 3, Part F, Section VII.B.1.a.(i)(2))

1.20.4.4 "Operating day" means any twenty-four-hour period between midnight and the following midnight during which any fuel is combusted at any time in a BART unit, BART alternative program unit, or Reasonable Progress unit. (Colorado Regulation No. 3, Part F, Section VII.A.4)

1.20.5 Recordkeeping and Reporting Requirements

1.20.5.1 The owner/operating shall maintain the following records for at least five years (Colorado Regulation No. 3, Part F, Section VII.D):

a. All CEMS data as required in the applicable regulation, stack test data, and data collected pursuant to the CAM plan, including the date, place, and time of sampling, measurement, or testing; parameters sampled, measured, or tested and results; the company, entity, or person that performed the testing, if applicable; and any field data sheets from testing. (Colorado Regulation No. 3, Part F, Section VII.D.1)

b. Records of quality assurance and quality control activities for emissions measuring systems including, but not limited to, any records required by 40 CFR Part 60, 63, or 75. (Colorado Regulation No. 3, Part F, Section VII.D.2)

1.20.5.2 The owner/operator of a BART, RP or BART alternative program unit shall submit semi-annual excess emissions reports no later than the 30th day following the end of each semi-annual period unless more frequent

reporting is required. Excess emissions means emissions that exceed the Regional Haze emissions limits. Excess emission reports shall include the information specified in 40 CFR Part 60, Section 60.7(c). (Colorado Regulation No. 3, Part F, Section VII.E) Frequency of excess emission reports shall be quarterly as specified in Conditions 12.5 and 12.6.

1.20.5.3 The owner/operator of a BART, RP or BART alternative program unit shall submit reports of any required performance stack tests for particulate matter, to the Division within 45 calendar days as required by Condition 11.3 of this permit.

2. B001 & B002 - Boilers No. 1 and No. 2, Alternate Fuels for Startup and Flame Stabilization

2.1 The permittee shall maintain records of annual usage of natural gas and fuel oil, and the associated annual heat content. This information shall be used as follows:

2.1.1 Annual fuel consumption shall be used to calculate emissions for the purposes of APEN reporting, as required by Conditions 1.2 and 1.5. The emission factors (EPA's Compilation of Emission Factors (AP-42), No. 2 Fuel Oil - Section 1.3 (dated 9/98) and Natural Gas - Section 1.4 (dated 3/98)) identified in the table have been approved by the Division and shall be used to calculate emissions.

Pollutant	Emission Factor - Natural Gas	Emission Factor - No. 2 Fuel Oil
PM	1.9 lbs/MMscf	2 lbs/10^3 gal
PM_{10}	1.9 lbs/MMscf	1 lbs/10^3 gal
CO	**Unit 1** - 84lbs/MMscf **Unit 2** – 24 lbs/MMscf	5 lbs/10^3 gal
VOC	5.5 lbs/MMscf	0.2 lbs/10^3 gal

Annual emissions shall be calculated, for the purposes of APEN reporting and payment of annual fees using the above emission factors and the annual fuel usage in the following equation:

$$\text{Tons/yr} = \frac{\text{EF (lbs/fuel consumption unit) x Annual Fuel Usage (fuel consumption unit/yr)]}}{\text{2000 lbs/ton}}$$

2.1.2 If, for **Boiler No. 2**, the total annual heat content of these fuels exceeds 5 percent of the total heat content of all fuels combusted, this permit shall be reopened to incorporate appropriate applicable requirements for combusting combined/alternative fuels.

3. Particulate Matter Emissions - Fugitive Sources

F001 - Coal Handling and Storage

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM and PM_{10}	3.1.	N/A	N/A	N/A	Recordkeeping and Calculation	As Needed
Fugitive Particulate Emissions Requirements	3.2.1. & 3.2.3.	N/A	N/A	N/A	Certification	Semi-Annually
Missile 3B Only: Coal Processed	3.3.	N/A	2,300,000 tons/yr	N/A	Recordkeeping	Monthly
Missile 3B Only - Fugitive Particulate Emissions Requirements	3.2.2. & 3.2.3.	N/A	N/A	N/A	Certification	Semi-Annually

F002 - Ash Handling and Disposal

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM and PM_{10}	3.1.	N/A	N/A	N/A	Recordkeeping and Calculation	As Needed
Ash Disposed	3.4.	N/A	329,332 tons/yr	N/A	Recordkeeping	Monthly
Fugitive Particulate Emissions Requirements	3.2.2. & 3.2.3..	N/A	N/A	N/A	Certification	Semi-Annually

F003 - Paved and Unpaved Roads

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM and PM_{10}	3.1.	N/A	N/A	N/A	Recordkeeping and Calculation	As Needed
Fugitive Particulate Emissions Requirements	3.2.1. & 3.2.3.	N/A	N/A	N/A	Certification	Semi-Annually

F004 – New Rail Car Unloader, Associated Conveyor and Lowering Well

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	3.5.	N/A	3.70 tons/yr	See Condition 3.5.	See Condition 3.5.	
PM_{10}		N/A	1.75 tons/yr			
Coal Processed	3.3.	N/A	2,300,000 tons/yr	N/A	Recordkeeping	Monthly
Fugitive Particulate Emissions Requirements	3.2.2. & 3.2.3.	N/A	N/A	N/A	Certification	Semi-Annually
Commence Construction	3.6.	Construction Must Commence within 18 Months		N/A	See Condition 3.6.	
Removal of Existing Truck Unloader, Associated Conveyors and Stacking Missiles	3.7.	Upon Startup of the New Rail Car Unloader, Associated Conveyor and Lowering Well		N/A	See Condition 3.7.	
Startup Notification	3.8.	Notify Division within 30 Days Prior to Startup		N/A	Notification	Within 30 Days
Compliance Certification	3.9.	Certify Compliance within 180 Days of Startup		N/A	Certification	Within 180 Days
NSPS Subpart Y Requirements	3.10.	Operate in Accordance with the Fugitive Coal Dust Emissions Control Plan		N/A	Submittal of Fugitive Coal Dust Emissions Control Plan	Prior to Startup
NSPS General Conditions	3.11.	N/A	N/A	N/A	As Required by NSPS General Provisions	Subject to NSPS General Provisions

3.1 Fugitive Particulate emissions are subject to the General Conditions in Section V of this Permit including Recordkeeping and Reporting requirements listed under Condition 22.

3.2 Fugitive Particulate Emissions Requirements:

3.2.1 For existing sources: Every owner or operator of a source or activity shall employ such control measures and operating procedures as are necessary to minimize fugitive particulate emissions (Colorado Regulation No. 1, Section III.D.1.a).

3.2.2 For new sources: Every owner or operator of a source or activity which is required to obtain an emission permit under Regulation No. 3, Part B shall operate under an approved fugitive particulate emission control plan (Colorado Regulation No. 1, Section III.D.1.b). The permittee shall utilize the following control measures to minimize fugitive particulate emissions:

3.2.2.1 The following measure shall be used to minimize emissions **from missile 3B** (As provided for under the provisions in Section I, Condition 1.3 and Colorado Regulation No. 3, Part C, Sections I.A.7 and III.B.7, with control measures as indicated in November 2, 2000 letter from source):

a. Dust collection (enclosures) and suppression at conveyor drop points will be used, as needed, to control fugitive dust from the missile.

b. The coal unloading missile shall be operated and maintained to minimize fugitive emissions from this operation. This includes maintaining the integrity of the missile and periodic inspections of the door seals to minimize coal dust leakage from these openings.

3.2.2.2 The following measures shall be used to minimize emission **from ash handling and disposal** (Colorado Construction Permit 83RO246, as modified under the provisions of Section I, Condition 1.3):

a. Watering of fly ash at the disposal site shall be sufficient to minimize fugitive particulate emissions.

b. Vehicle speed on the haul roads to the disposal site shall be posted and limited to 30 mph.

c. Haul roads shall be graveled and sufficiently watered to minimize fugitive particulate emissions.

d. The trucks shall be loaded in a manner to prevent spillage en route.

e. Entryways to paved roads shall be gravelled to prevent carryout of mud and dirt onto the paved surface.

3.2.2.3 The following measures shall be used to minimize emissions **from the new rail car unloader, associated conveyor and lowering well** (as provided for under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part C, Sections and I.A.7 and III.B.7, based on the permit modification application submitted on August 14, 2009):

a. The rail car unloader shall be partially enclosed (a roof and two sides).

b. Water sprays or other chemical dust suppressants shall be applied, as needed, when unloading coal from rail cars or trucks to hoppers.

c. Water sprays or other chemical dust suppressants shall be applied, as needed, on the associated conveyor prior to unloading coal to the pile.

3.2.3 For new and existing sources: A fugitive particulate emission control plan, or a modification to an existing plan, shall be required to be submitted if the Division determines that for this source or activity visible emissions are in excess of 20% opacity; or visible emissions are being transported off the property; or if this source or activity is operating with emissions that create a nuisance. The control plan shall be submitted to the Division within the time period specified by the Division (Colorado Regulation No. 1, Section III.D.1.c). The 20% opacity, no off-property transport, and nuisance emission limitations are guidelines and not enforceable standards and no person shall be cited for violation thereof pursuant to C.R.S. 25-7-115 (Colorado Regulation No. 1, Section III.D.1.e.(iii)).

3.3 The quantity of coal processed shall not exceed the following limitations:

3.3.1 The quantity of coal processed **through missile 3B** shall not exceed the limitations stated above (As provided for under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part C, Sections I.A.7 and III.B.7, with requested throughputs as indicated in November 2, 2000 letter from source).

3.3.2 The quantity of coal processed **through the new rail car unloader, associated conveyor and lowering well** shall not exceed the limitations stated above (as provided for under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part C, Sections and I.A.7 and III.B.7, based on the APEN submitted on August 14, 2009).

Monthly quantities of coal processed **through missile 3B and the new rail car unloader, associated conveyor and lowering well** shall be determined using belt scales and facility records as necessary. Monthly quantities of coal processed shall be used in a twelve month rolling total to verify compliance with annual limitations. Each month, a new twelve month total shall be calculated using the previous twelve months data. The twelve month total of coal unloaded shall be compared to the annual limitation to monitor compliance.

3.4 Ash disposed shall not exceed the limitations stated above (Colorado Construction Permit 83RO246, as modified under the provisions of Section I, Condition 1.3). Monthly quantities of ash disposed shall be determined and recorded monthly, using the methodology defined in Condition 4.3.1 and facility records as necessary. Monthly quantities of ash disposed of shall be used in a twelve month rolling total to verify compliance with annual limitations. Each month, a

new twelve month total shall be calculated using the previous twelve months data. The twelve month total of ash disposed of shall be compared to the annual ash disposal limit to monitor compliance.

3.5 Particulate Matter (PM and PM_{10}) emissions from **the new rail car unloader, associated conveyor and lowering well** shall not exceed the limitations stated above (as provided for under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part C, Sections I.A.7 and III.B.7, based on the requested emissions on APEN submitted August 14, 2009). Compliance with the annual limitations shall be monitored as follows:

3.5.1 The conveyor from the rail car unloader to the lowering well shall be enclosed and the integrity of the enclosures maintained.

3.5.2 The control measures specified in Condition 3.2.2.3 shall be followed to minimized fugitive particulate matter emissions.

3.5.3 The moisture content of the coal, as determined through coal sampling required by Condition 1.3, shall not be less than 4.5%.

3.5.4 The number of transfer points from the rail car unloader to the pile shall not be increased. Permitted emissions are based on 3 transfer points.

3.5.5 In the absence of credible evidence to the contrary, compliance with the PM and PM_{10} emission limitations shall be presumed, provided the requirements in Conditions 3.5.1 through 3.5.4 are met and the coal consumption limits in Condition 3.3.2 is met.

3.6 The permit conditions in this Section II.3 of this permit **related to the new rail car unloader, associated conveyor and lowering well** shall expire if construction does not commence within 18 months of issuance of this revised permit [March 19, 2010]; construction is discontinued for a period of 18 months of more; or construction is not completed within a reasonable time of the estimated completion date (Colorado Regulation No. 3, Part B, Section III.F.4.a.(i) thru (iii)).

3.7 The **existing truck unloading system, associated conveyors and stacking missiles** shall be removed and/or rendered inoperable upon commencing operation of the new rail car unloader, associated conveyor and lowering well.

3.8 The permittee shall notify the Division, in writing, thirty (30) days prior to startup of **the new rail car unloader, associated conveyor and lowering well** (Colorado Regulation No. 3, Part B, Section III.G.1).

3.9 Within one hundred eighty (180) calendar days after commencement of operation, the permittee shall certify compliance with the conditions in this Section II.3 of this permit **related to the new rail car unloader, associated conveyor and lowering well** (Colorado Regulation No. 3, Part B, Section III.G.2). Submittal of the first required semi-annual monitoring report (Appendix B),

after startup of the new rail car unloader, associated conveyor and lowering well shall serve as the self-certification that new rail car unloader, associated conveyor and lowering well can comply with the conditions in this Section II.3 of this permit.

3.10 The **new rail car unloader, associated conveyor and lowering well** is subject to the requirements in 40 CFR Part 60, Subpart Y – Standards of Performance for Coal Preparation and Processing Plants, as adopted by reference in Colorado Regulation No. 6, Part A. Specifically the new rail car unloader, associated conveyor and lowering well is subject to the following requirements:

Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the opacity limitations in § 60.254(b)(1) (§ 60.254(b)(3)).

3.10.1 The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions as specified in the following requirements. (§ 60.254(c))

3.10.1.1 The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile. (§ 60.254(c)(1))

3.10.1.2 For open coal storage piles, the fugitive coal dust emissions control plan must require that one or more of the following control measures be used to minimize to the greatest extent practicable fugitive coal dust: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents on the source (when the provisions of Condition 3.10.1.6 of this permit are met), use of a wind barrier, compaction, or use of a vegetative cover. The owner or operator must select, for inclusion in the fugitive coal dust emissions control plan, the control measure or measures listed in this paragraph that are most appropriate for site conditions. The plan must also explain how the measure or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source. (§ 60.254(c)(2))

3.10.1.3 Any owner or operator of an affected facility that is required to have a fugitive coal dust emissions control plan may petition the Administrator to approve, for inclusion in the plan for the affected facility, alternative control measures other than those specified in Condition 3.10.1.2 of this permit as specified in § 60.254(c)(3)(i) through (iv). (§ 60.254(c)(3))

3.10.1.4 The owner or operator must submit the fugitive coal dust emissions control plan to the Administrator or delegated authority as specified

below. (§ 60.254(c)(4))

a. The plan must be submitted to the Administrator or delegated authority prior to startup of the new, reconstructed, or modified affected facility. (§ 60.254(c)(4)(i))

b. The plan must be revised as needed to reflect any changing conditions at the source. Such revisions must be dated and submitted to the Administrator or delegated authority before a source can operate pursuant to these revisions. The Administrator or delegated authority may also object to such revisions as specified in Condition 3.10.1.5. (§ 60.254(c)(4)(ii))

3.10.1.5 The Administrator or delegated authority may object to the fugitive coal dust emissions control plan as specified below. (§ 60.254(c)(5))

a. The Administrator or delegated authority may object to any fugitive coal dust emissions control plan that it has determined does not meet the requirements of Conditions 3.10.1.1 and 3.10.1.2 of this permit. (§ 60.254(c)(5)(i))

b. If an objection is raised, the owner or operator, within 30 days from receipt of the objection, must submit a revised fugitive coal dust emissions control plan to the Administrator or delegated authority. The owner or operator must operate in accordance with the revised fugitive coal dust emissions control plan. The Administrator or delegated authority retain the right, under Condition 3.10.1.5 of this permit, to object to the revised control plan if it determines the plan does not meet the requirements of Conditions 3.10.1.1 and 3.10.1.2 of this permit. (§ 60.254(c)(5)(ii))

3.10.1.6 Where appropriate chemical dust suppression agents are selected by the owner or operator as a control measure to minimize fugitive coal dust emissions, (1) only chemical dust suppressants with Occupational Safety and Health Administration (OSHA)-compliant material safety data sheets (MSDS) are to be allowed; (2) the MSDS must be included in the fugitive coal dust emissions control plan; and (3) the owner or operator must consider and document in the fugitive coal dust emissions control plan the site-specific impacts associated with the use of such chemical dust suppressants. (§ 60.254(c)(6))

3.10.2 The owner or operator of a coal preparation and processing plant that commenced construction, reconstruction, or modification after April 28, 2008, shall maintain in a logbook (written or electronic) on-site and make it available upon request. The logbook shall record the information specified in §§ 60.258(a)(1) through (6) (§ 60.258(a)).

3.11 The **new rail car unloader, associated conveyor and lowering well** is subject to the requirements in 40 CFR Part 60 Subpart A - General Provisions, as adopted by reference in Colorado Regulation No. 6, Part A. Specifically, the new railcar unloader, associated conveyor and lowering well is subject to the following requirements:

3.11.1 At all times, including periods of startup, shutdown, and malfunction owners and operators shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source (§ 60.11(d)).

3.11.2 No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gasses discharged to the atmosphere (§ 60.12).

3.11.3 The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility or any malfunction of the air pollution control equipment (§ 60.7(b)).

3.11.4 Written notification of construction and initial startup dates shall be submitted to the Division as required under §§ 60.7(a)(1) and (3).

4. Particulate Matter Emissions – Ash and Coal Handling

P001 - Ash Silo

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor (lbs/ton)	Monitoring	
		Short Term	Long Term		Method	Interval
PM and PM_{10}	4.1.	N/A	PM 22.39 tons/yr PM_{10} 22.39 tons/yr	Loading PM 0.61 lbs/ton PM_{10} 0.61 lbs/ton Unloading PM 1.5 lbs/ton PM_{10} 1.5 lbs/ton	Recordkeeping and Calculation	Monthly
Ash and Spent Sorbent Processed	4.3.	N/A	297,293 tons/yr	N/A	Recordkeeping	Monthly
Opacity	4.4.	Less Than or Equal to 20%		N/A	See Condition 4.4.	

P002 - Coal Handling System (Crushing and Conveying)

The 1973 portion of the coal handling system includes conveyors 6A, 4B and 5B from the pile to the coal bunkers for Units 1 and 2, there are a total of 4 enclosed transfer points in the 1973 portion of the system.

Parameter		Permit Condition Number	Limitations Short Term	Limitations Long Term	Compliance Emission Factor	Monitoring Method	Monitoring Interval
1965 portion	PM	4.2.	N/A	N/A	See Condition 4.2.	Recordkeeping and Calculation	Annually
	PM_{10}		N/A	N/A			
1973 portion	PM		N/A	0.40 tons/yr			Monthly
	PM_{10}		N/A	0.20 tons/yr			
1965 portion	Coal Handled	4.3.	N/A	N/A	N/A	Recordkeeping	Annually
1973 portion			N/A	2,100,000 tons/yr	N/A		Monthly
Opacity		4.5.	Less Than or Equal to 20%		N/A	See Condition 4.5.	

P007 - New Crushers

Parameter	Permit Condition Number	Limitations Short Term	Limitations Long Term	Compliance Emission Factor	Monitoring Method	Monitoring Interval
PM	4.2.	N/A	1.05 tons/yr	0.02 lbs/ton	Recorkeeping and Calculation	Monthly
PM_{10}		N/A	0.32 tons/yr	0.006 lbs/ton		
Coal Processed	4.3.	N/A	2,100,000 tons/yr	N/A	Recordkeeping	Monthly
Opacity	4.5.	Less Than or Equal to 20%		N/A	See Condition 4.5.	
Commence Construction	4.6.	Construction Must Commence within 18 Months		N/A	See Condition 4.6.	
Removal of Existing Crushers	4.7.	Upon Startup of the New Crushers		N/a	See Condition 4.7.	
Startup Notification	4.8.	Notify Division within 30 Days Prior to Startup		N/A	Notification	Within 30 Days
Compliance Certification	4.9.	Certify Compliance within 180 Days of Startup		N/A	Certification	Within 180 Days
NSPS Subpart Y Requirements	4.10.	Not to Exceed 10% Opacity		N/A	See Condition 4.10.	
NSPS General Conditions	4.11.	N/A	N/A	N/A	As Required by NSPS General Provisions	Subject to NSPS General Provisions

4.1 Particulate Matter emissions (PM and PM_{10}) from the ash silo shall not exceed the above limitations (Colorado Construction Permit 13RO598, as modified under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part B, Section II.A.6 and Part C, Section X,

based on requested emissions provided on the APEN submitted January 22, 2007). Compliance with the annual limitation shall be monitored by calculating emissions monthly, using the monthly quantity of ash processed, as required by Condition 4.3.1 and the above emission factors (EPA's Compilation of Emission Factors (AP-42), dated January 1995, Section 11.17) in the following equations:

Ash Silo Emissions = Silo Loading + Silo Unloading

Where:

$$\text{Silo Loading} = \frac{[\text{EF (lbs/yr) x annual ash loaded (tons/yr)}]}{2000 \text{ lbs/ton}}\ ;\ \text{Control efficiency} = 99.9\%$$

$$\text{Silo Unloading} = \frac{[\text{EF (lbs/yr) x annual ash unloaded (tons/yr)}]}{2000 \text{ lbs/ton}};\ \text{Control efficiency} = 90\%$$

Note that in order to use the control efficiencies identified the following conditions shall be met:

4.1.1 The ash silo baghouse shall be operated and maintained in accordance with the requirements in Condition 11.2.

4.1.2 When unloading, the water spray system shall be operated and maintained in accordance with good engineering practices.

Monthly emissions shall be used in a rolling twelve month total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

4.2 Particulate matter emissions (PM and PM_{10}) from the coal handling system shall be monitored as follows:

4.2.1 Annual emissions of PM and $PM_{10,}$ **from the 1965 portions of the coal handling system,** for the purposes of APEN reporting and payment of annual fees will be determined using the emission factors below and the annual quantity of coal handled, as required by Condition 4.3.2, in the following equations:

Emissions from coal handling = emissions from coal conveying + emissions from coal crushing

Where:

Coal conveying emissions (from AP-42, Section 13.2.4, dated November 2006):

$$PM = PM_{10} = \frac{k \times 0.0032 \times (U/5)^{1.3} \times D \times \text{tons of coal transferred per year}}{(M/2)^{1.4} \times (2000 \text{ lbs/1 ton})}$$

Where: k = particle size multiplier, dimensionless (for PM 0.74, for PM_{10} 0.35)
U = mean wind speed, mph (from August 14, 2009 modification application, 1 mph for enclosed transfer points and 8.7 mph for open transfer points)

M = moisture content of coal, in percent (from T5 application and August 14, 2009 modification application, 4.5%)
D = number of transfer points, dimensionless

Coal crushing emissions (from EPA's WebFIRE, SCC 3-05-010-10):

$$PM = \frac{(0.02 \text{ lbs/ton coal}) \times (\text{tons of coal crushed per year})}{2000 \text{ lbs/ton}}$$

$$PM_{10} = \frac{(0.006 \text{ lbs/ton coal}) \times (\text{tons of coal crushed per year})}{2000 \text{ lbs/ton}}$$

Note that a control efficiency of 90% may be applied to the emission calculations for the crushers provided the integrity of the crusher enclosure is maintained.

4.2.2 Particulate matter emissions (PM and PM_{10}), **from the 1973 portions of the coal handling system**, shall not exceed the above limitations (As provided for under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part C, Sections I.A.7 and III.B.7, with revised emissions to take credit for covered enclosures and fewer transfer points (transfer from lowering well to pile is addressed in permitted emissions for the new rail car unloader)). Compliance with the annual limitation shall be monitored by calculating emissions monthly, using the monthly quantity of coal handled, as required by Condition 4.3.3 and the equation in Condition 4.2.1. Monthly emissions shall be used in a rolling twelve month total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

4.2.3 Particulate matter emissions (PM and PM_{10}), **from the new crushers** shall not exceed the above limitations (as provided for under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part C, Sections I.A.7 and III.B.7, based on the requested emissions on APEN submitted August 14, 2009). Compliance with the annual limitation shall be monitored by calculating emissions monthly, using the monthly quantity of coal processed, as required by Condition 4.3.3 and the above emission factors (from EPA's WebFIRE, SCC 3-05-010-10) in the following equation:

$$\text{Tons/month} = \frac{(\text{EF, lbs/ton coal}) \times (\text{tons of coal crushed per year})}{2000 \text{ lbs/ton}}$$

Note that a control efficiency of 95% may be applied to the emission calculations since the crushers are enclosed and located in an underground tunnel.

Monthly emissions shall be used in a rolling twelve month total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

4.3 The quantity of Ash Processed through the ash silo and the quantity of Coal Handled shall be monitored and recorded as follows:

4.3.1 The Ash and Spent Sorbent Processed through the ash silo shall not exceed the above limitations (Colorado Construction Permit 13RO598, as modified under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part B, Section II.A.6 and Part C, Section X, based on requested emissions provided on the APEN submitted January 22, 2007). Compliance with the ash processing limit shall be monitored by determining the quantity of fly ash and spent sorbent processed monthly. The quantity of ash processed shall be determined using the average ash content of the coal, as determined through coal sampling required in Condition 1.7 and coal consumption records (Condition 1.6). An 80% fly-ash factor shall be assumed. The quantity of fly ash shall be increased by 25% to account for the spent sorbent. The monthly quantity of ash and spent sorbent processed shall be used in a rolling twelve month total to monitor compliance with the annual limitation. Each month a new twelve month total shall be calculated using the previous twelve months data.

4.3.2 The quantity of Coal Handled through **the 1965 portions of the coal handling system** shall be monitored and recorded annually. The quantity of coal handled shall be determined using belt scales and corporate records as necessary.

4.3.3 The quantity of coal handled through **the 1973 portions of the coal handling system and the new crushers** shall not exceed the above limitations (<u>1973 coal handling system:</u> As provided for under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part C, Sections I.A.7 and III.B.7, with requested throughput as indicated in November 2, 2000 letter from source) and <u>new crushers:</u> as provided for under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part C, Sections and I.A.7 and III.B.7, based on the APEN submitted on August 14, 2009). Compliance with the annual limitation shall be monitored by recording the quantity of coal handled monthly. The quantity of coal handled shall be determined using belt scales and corporate records as necessary. Monthly quantities of coal handled shall be used in a rolling twelve month total to monitor compliance with the annual limitation. Each month a new twelve month total shall be calculated using the previous months data.

4.4 Opacity of emissions from the ash silo shall not exceed 20% (Colorado Regulation No. 1, Section II.A.1). In the absence of credible evidence to the contrary, the ash silo shall be presumed to be in compliance with the 20% opacity limit provided the requirements in Conditions 4.1.1 and 4.1.2 are met.

4.5 Opacity of emissions from the coal handling systems shall not exceed 20% (Colorado Regulation No. 1, Section II.A.1). In the absence of credible evidence to the contrary, the coal handling system shall be presumed to be in compliance with the opacity requirements provided the following conditions are met:

4.5.1 The **conveyors** shall be enclosed and the integrity of the enclosures maintained. Water spray and/or foam surfactant suppression systems for the conveyors shall be used as necessary.

4.5.2 The **existing crushers** shall be enclosed and the integrity of the enclosures maintained.

4.5.3 The visible emission observations required by Condition 4.10.3 for the **new crushers** meet the opacity standard specified in Condition 4.5.

4.6 The permit conditions in this Section II.4 of this permit **related to the new crushers** shall expire if construction does not commence within 18 months of issuance of this revised permit [March 19, 2010]; construction is discontinued for a period of 18 months of more; or construction is not completed within a reasonable time of the estimated completion date (Colorado Regulation No. 3, Part B, Section III.F.4.a.(i) thru (iii)).

4.7 The **existing crushers** shall be removed and/or rendered inoperable upon commencing operation of the new crushers.

4.8 The permittee shall notify the Division, in writing, thirty (30) days prior to startup of **the new crushers** (Colorado Regulation No. 3, Part B, Section III.G.1).

4.9 Within one hundred eighty (180) calendar days after commencement of operation, the permittee shall certify compliance with the conditions in this Section II.4 of this permit **related to the the new crushers** (Colorado Regulation No. 3, Part B, Section III.G.2). Submittal of the first required semi-annual monitoring report (Appendix B), after startup of the new crushers shall serve as the self-certification that new crushers can comply with the conditions in this Section II.4 of this permit.

4.10 The **new crushers** are subject to the requirements in 40 CFR Part 60, Subpart Y – Standards of Performance for Coal Preparation and Processing Plants, as adopted by reference in Colorado Regulation No. 6, Part A. Specifically the new crushers are subject to the following requirements:

4.10.1 On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008, must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater. (§ 60.254(b)(1))

4.10.2 An owner or operator of each affected facility that commenced construction, reconstruction, or modification on or before April 28, 2008, must conduct all performance tests required by § 60.8 to demonstrate compliance with the applicable emission standards using the methods identified in Condition 4.10.4. (§ 60.255(a))

4.10.3 For each affected facility subject to an opacity standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the requirements in Conditions 4.10.3.1 and 4.10.3.2, as applicable. (§ 60.255(b)(2))

4.10.3.1 If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the previous performance test was required to be completed. (§ 60.255(b)(2)(i))

4.10.3.2 If all 6-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed. (§ 60.255(b)(2)(ii))

4.10.4 The owner or operator must determine compliance with the applicable opacity standards as specified in Conditions 4.10.4.1 and 4.10.4.2. (§ 60.257(a))

4.10.4.1 Method 9 of appendix A–4 of this part and the procedures in §60.11 must be used to determine opacity, with the following exceptions. (§ 60.257(a)(1))

a. The duration of the Method 9 of appendix A–4 of this part performance test shall be 1 hour (ten 6-minute averages). (§ 60.257(a)(1)(i))

b. If, during the initial 30 minutes of the observation of a Method 9 of appendix A–4 of this part performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes. (§ 60.257(a)(1)(ii))

4.10.4.2 A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the conditions specified in § 60.257(a)(3)(i) through (3) are met. (§ 60.257(a)(3))

4.10.5 The owner or operator is subject to the recordkeeping requirements specified in Condition 3.10.2.

4.10.6 For the purpose of reports required under section 60.7(c), any owner or operator subject to the provisions of this subpart also shall report semiannually all 6-minute average opacities that exceed the applicable standard. (§ 60.258(b)(3))

4.10.7 The owner or operator of an affected facility shall submit the results of initial performance tests to the Administrator or delegated authority, consistent with the provisions of section 60.8. (§ 60.258(c))

4.11 The **new crushers** are subject to the requirements in 40 CFR Part 60 Subpart A - General Provisions, as adopted by reference in Colorado Regulation No. 6, Part A. Specifically, the new crushers are subject to the requirements in Condition 3.11, as well as the following requirements:

4.11.1 The permittee shall submit a written notification of the opacity observation required by Condition 4.10.03 as specified in § 60.7(a)(6).

4.11.2 Except as otherwise provided for in Condition 4.10.4, compliance with opacity standards shall be demonstrated according to § 60.11.

4.11.3 Performance test requirements in § 60.8.

5. Particulate Matter Emissions - Sources Supporting the SO_2 Control System

P003 - Two (2) Recycle Ash Silos

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	5.1.	N/A	0.09 tons/yr	0.61 lbs/ton	Recordkeeping and Calculation	Monthly
PM_{10}			0.09 tons/yr	0.61 lbs/ton		
Recycle Ash Processed	5.2.	N/A	296,000 tons/yr	N/A	Recordkeeping	Monthly
Opacity	5.3.	Less Than or Equal to 20%		N/A	See Condition 5.3.	

P004 - Two (2) Recycle Mixers

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
PM	5.1.	N/A	0.16 tons/yr	1.08×10^{-3} lbs/ton	Recordkeeping and Calculation	Monthly
PM_{10}		N/A	0.16 tons/yr	1.08×10^{-3} lbs/ton		
Recycle Ash Processed	5.2.	N/A	296,000 tons/yr	N/A	Recordkeeping	Monthly
Opacity	5.3.	Less Than or Equal to 20%		N/A	See Condition 5.3.	

P005 - Two (2) Lime Storage Silos

Parameter	Permit Condition Number	Limitations Short Term	Limitations Long Term	Compliance Emission Factor	Monitoring Method	Monitoring Interval
PM	5.1.	N/A	0.01 tons/yr	0.61 lbs/ton	Recordkeeping and Calculation	Monthly
PM_{10}			0.01 tons/yr	0.61 lbs/ton		
Lime Processed	5.2.	N/A	22,500 tons/yr	N/A	Recordkeeping	Monthly
Opacity	5.3.	Less Than or Equal to 20%		N/A	See Condition 5.3.	

P006 - Two (2) Ball Mill Slakers

Parameter	Permit Condition Number	Limitations Short Term	Limitations Long Term	Compliance Emission Factor	Monitoring Method	Monitoring Interval
PM	5.1.	N/A	0.80 tons/yr	0.067 lbs/ton	Recordkeeping and Calculation	Monthly
PM_{10}		N/A	0.80 tons/yr	0.067 lbs/ton		
Lime Processed	5.2.	N/A	22,500 tons/yr	N/A	Recordkeeping	Monthly
Opacity	5.3.	Less Than or Equal to 20%		N/A	See Condition 5.3.	

5.1 Particulate Matter (PM and PM_{10}) emissions shall not exceed the above limitations (Colorado Construction Permits 98RO0374 (lime silos), 98RO0375 (ball mill slakers), 98RO0376 (recycle ash silos) and 98RO0377 (recycle mixers), as modified under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part C, Sections I.A.7 and III.B.7, to revise the PM and PM_{10} emission limits for the recycle ash silos and recycle mixers to requested levels on the APEN submitted on September 23, 2008). Monthly emissions shall be calculated using the quantity of material processed monthly, as required by Condition 5.3, and the above emission factors (EPA's Compilation of Emission Factors (AP-42), dated January 1995, Section 11.17 - for the recycle ash and lime silos and based on manufacturers' guarantees for recycle mixers and lime slakers converted to a lbs/processing rate factor) in the following equation:

lbs/month = EF (lbs/ton) x monthly processing rate (tons/month)

Note that a control efficiency of 99.9 % may be applied to the emission calculations for the silos, provided the silo baghouses are operated and maintained as required by Condition 11.2. The emission factors for the recycle mixers and lime slakers are controlled emission factors. The scrubbers on the recycle mixers and lime slakers shall be operated and maintained in accordance with the manufacturers' recommendations and good engineering practices in order to use these emission factors.

Monthly emissions shall be used in a twelve month rolling total to monitor compliance with the annual emission limitations. Each month a new twelve month rolling total shall be calculated using the previous twelve months data.

5.2 The quantity of materials processed through the recycle ash silo and the recycle mixers and the lime storage silos and lime slakers shall not exceed the above limitations (Colorado Construction

Permits 98RO0374 (lime silos), 98RO0375 (ball mill slakers), 98RO0376 (recycle ash silos) and 98RO0377 (recycle mixers), as modified under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part C, Sections I.A.7 and III.B.7, to revise the throughput limits for the recycle ash silos and recycle mixers to requested levels on the APEN submitted on September 23, 2008). Compliance with the annual limitations shall be monitored by recording the quantity of material processed through the recycle ash silos, recycle mixers, lime storage silos and lime slakers monthly. The monthly quantity of material processed shall be maintained in a rolling twelve month total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

5.3 Opacity of emissions **from each** silo, mixer and slaker exhaust point shall not exceed 20% (Colorado Construction Permits 98RO0374 (lime silos), 98RO0375 (ball mill slakers), 98RO0376 (recycle ash silos) and 98RO0377 (recycle mixers)). Compliance with the opacity requirement shall be monitored as follows:

5.3.1 In the absence of credible evidence to the contrary, each silo shall be presumed to be in compliance with the 20% opacity limit provided each silo baghouse is operated and maintained as required by Condition 11.2.

5.3.2 In the absence of credible evidence to the contrary, each recycle mixer and associated scrubber shall be presumed to be in compliance with the 20% opacity limit provided the scrubbers are operated and maintained in accordance with the manufacturers' recommendations and good engineering practices.

5.3.3 In the absence of credible evidence to the contrary, each ball mill slaker and associated scrubber shall be presumed to be in compliance with the 20% opacity limit provided the scrubbers are operated and maintained in accordance with the manufacturers' recommendations and good engineering practices.

6. M001 & M002 -Cooling Towers

M001 - Unit No. 1 (Boiler No. 1) Cooling Tower

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
Water Circulated	6.1.	N/A	N/A	N/A	Recordkeeping	Annually
Total Solids Analysis	6.2.	N/A	N/A	N/A	Laboratory Analysis	Annually
PM	6.3.	N/A	N/A	See Condition 6.3	Recordkeeping and Calculation	Annually
PM_{10}						
Opacity	6.4.	Not to Exceed 20%		N/A	See Condition 6.4.	

M002 - Unit No. 2 (Boiler No. 2) Cooling Tower

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
Water Circulated	6.1.	N/A	70,430.4 mmgal/yr	N/A	Recordkeeping	Monthly
Total Solids Analysis	6.2.	N/A	N/A	N/A	Laboratory Analysis	Semi-Annually
PM	6.3.	N/A	5.15 tons/yr	See Condition 6.3	Recordkeeping and Calculation	Monthly
PM_{10}			5.15 tons/yr			
VOC			1.9 tons/yr	0.0527 lbs/mmgal (as $CHCl_3$)		
Opacity	6.4.	Not to Exceed 20%		N/A	See Condition 6.4.	

6.1 Water Circulated through the cooling towers shall be monitored and recorded as follows:

6.1.1 The quantity of Water Circulated **from the Unit 1 (Boiler No. 1**) cooling tower shall be monitored and recorded annually. The annual quantity of water circulated through the unit shall be used in the emission calculations in Condition 6.3.

6.1.2 The quantity of Water Circulated **from the Unit 2 (Boiler No. 2**) cooling tower shall not exceed the above limitations (Colorado Construction Permit 96RO551-2). The quantity of water circulated through the unit shall be monitored and recorded monthly. Monthly quantities of water circulated through the unit shall be used in a twelve month rolling total to verify compliance with annual limitations. Each month, a new twelve month total shall be calculated using the previous twelve months data.

In addition, monthly quantities of water circulated through the unit shall be used in the emission calculations identified in Condition 6.3.

6.2 Samples of water circulated from each tower shall be taken and analyzed to determine the total solids concentration in accordance with the following frequency:

6.2.1 **For the Unit No. 1 cooling tower**, samples shall be taken and analyzed annually.

6.2.2 **For the Unit No. 2 cooling towe**r, samples shall be taken and analyzed semi-annually.

The total solids concentration shall be used to calculate particulate matter emissions as required by Condition 6.3. A copy of the procedures used to obtain and analyze samples shall be maintained and made available to the Division upon request.

6.3 Particulate Matter (PM and PM_{10}) and Volatile Organic Compound (VOC) emissions shall be monitored as follows:

6.3.1 Emissions of PM, PM_{10} and VOC **from the Unit No. 1 cooling tower** shall be calculated annually, using the equations in Condition 6.3.3, for purposes of APEN reporting and payment of annual fees.

6.3.2 Emissions of PM, PM_{10} and VOC **from the Unit No. 2 cooling tower** shall not exceed the limitations above (Colorado Construction Permit 96RO551-2, as modified under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part B, Section II.A.6 and Part C, Section X, to revise VOC emissions to requested levels on the APEN submitted on September 13, 2007). Emissions shall be calculated monthly using the equations in Condition 6.3.3. Monthly emissions shall be used in a twelve month rolling total to monitor compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

6.3.3 The following equations will be used to estimate emissions of PM, PM_{10} and VOC from the cooling towers.

PM = PM_{10} (lbs/yr or lbs/month) = Q x d x % drift x 31.3% drift dispersed x total solids concentration

Where: Q = water circulated, gal/yr or gal/month
d = density of water, lbs/gal (from T5 application d = 8.34 lbs/gal)
% drift = 0.001%
31.3% drift dispersed (from EPA-600/7-79-251a, November 1979, "Effects of Pathogenic and Toxic Materials Transported Via Cooling Device Drift - Volume1 - Technical Report", Page 63)
Total solids concentration = total solids concentration, in ppm (lbs solids/10^6 lbs water) - to be determined by Condition 6.2.

VOC = $CHCl_3$ (lbs/yr) = Q x EF x (1 mmgal/10^6 gal)

Where: Q = water circulated, gal/yr
EF = 0.0527 lbs/mmgal (from letter from Wayne C. Micheletti to Ed Lasnic, dated November 11, 1992)

6.4 Opacity of emissions from each cooling tower shall not exceed 20% (Colorado Regulation No. 1, Section II.A.1). In the absence of credible evidence to the contrary, compliance with the opacity standard shall be presumed, provided the drift eliminators on the towers are maintained and operated in accordance with manufacturers' requirements and good engineering practices.

7. Definitions

7.1 Boiler Operating Day

Boiler operating day for coal shall mean any calendar day in which coal is combusted in the boiler of a unit for more than 12 hours. If coal is combusted for more than 12 but less than 24 hours during a calendar day, the calculation of that day's SO_2 emissions for the unit shall be based solely upon the average of hourly continuous emission monitoring system (CEMS) data during hours in which coal was combusted in the unit, and shall not include any time in which coal was not combusted (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.II.2.b).

7.2 Rolling Average Basis

Rolling average basis shall mean an average over a period of time consisting of the last 30 or 90 boiler operating days, with a new daily average generated each successive boiler operating day, based on the sum of the daily averages for the last 30 or 90 boiler operating days (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.II.2.x).

8. Emission Factors

The permittee shall comply with the provisions of Regulation No. 3 concerning APEN reporting. Emission factors that are approved compliance factors specified within this permit cannot be adjusted without requiring a permit modification. Emission factors and/or other emission estimating methods used only to comply with the reporting requirements of this regulation can be updated and modified as specified. These changes by themselves, do not require any permitting activities though the resulting emission estimate may trigger permitting activities.

9. Catastrophic Failure (for Purposes of SO_2 Emissions)

9.1 A "catastrophic failure" shall mean a complete failure of the SO_2 emission control equipment at a unit that is directly caused by a force that the permittee could neither have controlled nor reasonably anticipated, and that could not have been prevented through the exercise of good air

pollution control practices for minimizing emissions (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.a.ix.(1)).

9.2 Without limitation, a catastrophic failure shall not include SO_2 emissions that are related to unit startup or shutdown; load fluctuations; operator failure; upsets (malfunctions); design, construction , or equipment defects that the permittee could have controlled or reasonably anticipated; or the failure of any SO_2 emission control equipment components due to ordinary wear and tear, irrespective of the permittee's efforts to maintain and/or replace such components (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.a.ix.(2)).

9.3 For purposes of determining the permittee's compliance with the SO_2 emission limitations in Conditions 1.3.2 through 1.3.4, no more than 24 hours of SO_2 data shall be excluded for any single "catastrophic failure" (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.a.ix.(3)).

9.4 For any boiler operating day for which data is excluded due to a catastrophic failure, the calculation of that day's average SO_2 emissions for the unit shall be based solely upon hours of nonexcluded CEMS data that would otherwise be counted. Days in which all such hours are excluded as a result of a catastrophic failure pursuant to this Condition 9 shall not be counted in calculating compliance with the SO_2 emission limitations (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.a.ix.(4)).

9.5 If the permittee wishes to invoke the catastrophic failure exception, they must perform the following (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.a.ix.(5)):

9.5.1 Notify the Division by phone immediately, but no later than two hours after the start of the next business day following such failure.

9.5.2 Provide a written report to the Division, within thirty (30) days of the failure, that contains the following:

9.5.2.1 All hourly SO_2 CEMS data the permittee wishes to have excluded;

9.5.2.2 Evidence of the permittee's notification to the Division; and

9.5.2.3 All evidence that demonstrate the failure is a "catastrophic failure" as defined in Condition 9.1.

9.6 If the permittee fails to follow the notice and/or reporting requirements in Condition 9.5, the catastrophic failure exception shall not apply (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.a.ix.(5)).

10. NSPS General Provisions – Unit 2 Only

10.1 At all times, including periods of startup, shutdown, and malfunction owners and operators shall to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source (40 CFR Part 60 Subpart A § 60.11(d) as adopted by Reference in Colorado Regulation No. 6, Part A).

10.2 No article, machine, equipment or process shall be used to conceal an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gasses discharged to the atmosphere (40 CFR Part 60 Subpart A § 60.12, as adopted by reference in Colorado Regulation No. 6, Part A).

11. Particulate Matter Emission Periodic Monitoring Requirements

11.1 Operation and Maintenance Requirements for Boiler Baghouses

The boiler baghouses shall be maintained and operated in accordance with good engineering practices. Any maintenance performed on the boiler baghouses shall be documented and made available to the Division upon request.

11.2 Operation and Maintenance Requirements for Other Baghouses

Baghouses, other than those on the boilers, shall be operated and maintained in accordance with manufacturers' recommendations and good engineering practices.

11.3 Stack Testing

Stack testing for particulate matter emissions shall be performed on Boilers 1 and 2 within 180 days of renewal permit issuance [April 1, 2009] in accordance with the requirements and procedures set forth in EPA Test Method 5 as set forth in 40 CFR Part 60, Appendix A. Frequency of testing, thereafter shall be annual except that: (1) if the first test required by this renewal permit or any subsequent test results indicate emissions are less than or equal to 50% of the emission limit, another test is required within five years; (2) if the first test required by this

renewal permit or any subsequent test results indicate emissions are more than 50%, but less than or equal to 75% of the emission limit, another test is required within three years; (3) if the first test required by this renewal permit or any subsequent test results indicate emissions are greater than 75% of the emission limit, an annual test is required until the provisions of (1) or (2) are met.

A stack testing protocol shall be submitted for Division approval at least thirty (30) calendar days prior to any performance of the test. No stack test shall be performed without prior written approval by the Division. The Division reserves the right to witness the test. The required number of copies of the compliance test results shall be submitted to the Division within forty-five (45) calendar days of the completion of the test.

12. Continuous Emission Monitoring and Continuous Opacity Monitoring Systems

12.1 CEM and COM Monitoring Systems QA/QC Plan

Continuous Emission Monitoring (CEM) and Continuous Opacity Monitoring (COM) systems are required for measurement of the stack SO_2, CO_2, NO_X (and diluent monitor for either CO_2 or O_2), gas flow rate and opacity emissions. In addition, continuous emission monitors are required to measure SO_2 emissions at the inlet of the lime spray dryers. The quality assurance/quality control plan required by 40 CFR Part 75, Appendix B shall be made available to the Division upon request. Revisions shall be made to the plan at the request of the Division.

12.2 General Provisions

12.2.1 The permittee shall ensure that all continuous emission and opacity monitoring systems required are in operation and monitoring unit emissions or opacity at all times that the boiler combusts any fuel except as provided in 40 CFR Part 75 § 75.11(e) and during periods of calibration, quality assurance, or preventative maintenance performed pursuant to 40 CFR Part 75 § 75.21 and Appendix B, periods of repair, periods of backups of data from a data acquisition and handling system or recertification performed pursuant to 40 CFR Part 75 § 75.20. The permittee shall also ensure, subject to the exceptions just noted, that the continuous opacity monitoring systems required are in operation and monitoring opacity during the time following combustion when fans are still operating unless fan operation is not required to be included under any other applicable requirement (40 CFR Part 75 § 75.10(d)).

12.2.2 Alternative monitoring system, alternative reference method, or any other alternative for the required continuous emission monitoring systems shall not be used without having obtained prior written approval from the appropriate agency, either the Division or the U. S. EPA, depending on which agency is authorized to approve such alternative under applicable law. Any alternative continuous emission monitoring systems or continuous opacity monitoring systems must be certified in accordance with the requirements of 40 CFR Part 75 prior to use.

12.2.3 All test and monitoring equipment, methods, procedures and reporting shall be subject to the review and approval by the appropriate agency, either the Division or the U. S. EPA, depending on which agency is authorized to approve such item under applicable law, prior to any official use. The Division shall have the right to inspect such equipment, methods and procedures and data obtained at any time. The Division may provide a witness(s) for any and all tests as Division resources permit.

12.2.4 A file shall be maintained of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by applicable portions of 40 CFR Part 75 recorded in a permanent form suitable for inspection.

12.2.5 Records shall be maintained of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the source; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

12.3 Continuous Emission Monitoring (CEM) Systems

12.3.1 The Continuous Emission Monitoring (CEM) Systems are subject to the requirements of 40 CFR Part 75. Each monitoring system shall meet the equipment, installation and performance specifications of 40 CFR Part 75, Appendix A.

12.3.2 The permittee shall follow the 40 CFR Part 75 quality assurance and quality control procedures of Appendix B and the conversion procedures of Appendix F.

12.3.3 When the continuous emission monitoring system is unable to provide quality assured data, the permittee may use either of the following monitoring methods:

12.3.3.1 A certified backup monitor may be used to monitor compliance with the NO_X and SO_2 emission limitations. If backup monitors are used as described in 40 CFR Part 75, Subpart C, the next quarterly report shall identify the dates and times the backup monitors were in use.

12.3.3.2 The permittee shall determine compliance with the SO_2 and NO_X emission limitations identified in Section III.2 and the SO_2 emission limitations identified in Section II, Conditions 1.3.2, 1.3.3 and 1.3.4 by using the data substitution procedures in 40 CFR Part 75, Subpart D (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.20 and 40 CFR Part 75, Subpart D).

12.3.4 **SO_2 Data Recording Requirements:** The SO_2 continuous emission monitoring systems shall record data as follows:

12.3.4.1 The continuous emission monitoring systems shall calculate hourly SO_2 concentrations in lbs/MMBtu at the inlet and outlet continuous emission monitors for each unit, in accordance with the requirements of 40 CFR Part 75 (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.16).

12.3.4.2 For each boiler operating day, the inlet and outlet hourly averages (Condition 12.3.4.1) shall be used to calculate the following at each unit: hourly SO_2 average percentage removal, daily SO_2 average percentage removal based on the hourly averages and 30 day rolling SO_2 average percentage removal based on the daily averages (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.16.a).

12.3.4.3 For each boiler operating day, the outlet hourly averages (Condition 12.3.4.1) shall be used to calculate the following at each unit: daily average SO_2 emissions based on the hourly averages and 30 day and 90 day rolling averages based on the daily averages (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.16.b).

12.3.4.4 As provided for in Condition 1.3.7, during startup of a unit, the first two hours after the first coal feeder has started shall be excluded from calculation of that boiler operating day's SO_2 emissions for the unit (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.16.c).

12.3.4.5 The outlet hourly averages (Condition 12.3.4.1) shall be used to calculate 3-hour rolling averages to monitor compliance with the SO_2 limitation in Condition 1.3.1. of this permit.

12.3.4.6 For any hour that valid quality assured continuous emission monitor data for a unit is unavailable, SO_2 emissions shall be calculated in accordance with the missing data substitution procedures in 40 CFR Part 75 as specified in Condition 12.3.3.2 (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.20).

12.3.5 **Unit 2 NO_X Data Recording Requirements:** The hourly NO_X averages calculated in lbs/MMBtu, as required by Section III.3 of this permit (Acid Rain Program standard requirements) shall be used to calculate 3-hour rolling averages to monitor compliance with the NO_X limitation in Condition 1.4 of Section II of this permit.

12.4 Continuous Opacity Monitoring (COM) Systems

12.4.1 The Continuous Opacity Monitoring (COM) Systems are subject to the requirements of 40 CFR Part 75. Each continuous opacity monitoring system shall meet the design, installation, equipment and performance specifications in 40 CFR Part 60, Appendix B, Performance Specification 1.

12.4.2 **Unit No. 1 Continuous Opacity Monitor Only:** The permittee shall check the zero and span drift of the system at least once per day and at such other times as designated by the Division, according to procedures approved by the Division. The Division may also make such determinations in order to assure proper quality assurance (Colorado Regulation No. 1, Section IV.F).

12.4.3 **Unit No. 2 Continuous Opacity Monitor Only:** The permittee shall follow the quality assurance and quality control procedures of 40 CFR Part 60, Subpart A § 60.13.

12.4.4 The permittee shall calculate opacity based on continuous opacity monitoring system data for each six-minute period of time any boiler is operating, in the manner, frequency and interval as prescribed in the applicable regulations (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.21).

12.4.5 The permittee shall ensure that the continuous opacity monitors are properly recording data at least 98% of each unit's operating time each quarter (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.23).

12.4.6 When the opacity monitoring system is unable to provide quality assured data in accordance with 40 CFR Part 75 for more than eight (8) consecutive hours, the source shall utilize either a backup opacity monitor or EPA Reference Method 9, or an "Operating Report During Monitor Unavailability" to satisfy the requirements for periodic monitoring under 40 CFR 70 and Colorado Regulation No. 3.

If backup monitors are used, the next quarterly report submitted by the source shall identify the dates and times the backup monitors were in use.

If EPA Reference Method 9 observations are used, visual observations in accordance with the reference method shall be taken and recorded by the source whenever the source is in operation and while fuel is present in the boiler.

When such circumstances exist, the visual observations shall be performed by a certified opacity observer each 24 hour period thereafter over a thirty minute period until the opacity monitoring system is again able to provide quality assured data. If a visual emissions observation cannot be performed in accordance with EPA Reference Method 9, the source shall record the reasons why that is the case. Subject to the provisions of C.R.S. § 25-7-123.1 and in the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.

If an "Operating Report During Monitor Unavailability" is used, the source shall record the opacity monitor registered reading prior to the monitor unavailability period and that immediately following such periods. A source must also record and maintain a description of unit operating characteristics that demonstrate the likelihood of compliance with the applicable opacity limitation. Such operating circumstances shall be identified on a unit specific basis and provided to the Division and shall include information related to the operation of the control equipment and any other operational parameters that may affect opacity.

12.5 Notification and Recordkeeping for Unit No. 1

The owner or operator of a facility required to install, maintain, and calibrate continuous monitoring equipment shall submit to the Division, by the end of the calendar month following the end of each calendar quarter, a report of excess emissions for all pollutants monitored for that quarter. This report shall consist of the following information and/or reporting requirements as specified by the Division.

12.5.1 The magnitude of excess emissions computed in accordance with Division guidelines, any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions (Colorado Regulation No. 1, Section IV.G.1).

12.5.2 The nature and cause of the excess emissions, if known (Colorado Regulation No. 1, Section IV.G.2).

12.5.3 The date and time identifying each period of equipment malfunction and the nature of the system repairs or adjustments, if any, made to correct the malfunction (Colorado Regulation No. 1, Section IV.G.3).

12.5.4 A schedule of the calibration and maintenance of the continuous monitoring system (Colorado Regulation No.1, Section IV.G.4).

12.5.5 Compliance with the reporting requirements of this section shall not relieve the owner or operator of the reporting requirements of Section II.E of the Common Provisions Regulation concerning the affirmative defense provisions for excess emissions during malfunctions (Colorado Regulation No. 1, Section IV.G.5).

12.6 Notification and Recordkeeping for Unit No. 2

12.6.1 The owner or operator of a facility required to install, maintain, and calibrate continuous monitoring equipment shall submit to the Division, by the end of the calendar month following the end of each calendar quarter, a report of excess emissions for all pollutants monitored for that quarter [40 CFR Part 60 Subpart A § 60.7(c)]. This report shall consist of the following information and/or reporting requirements as specified by the Division:

12.6.1.1 The magnitude of excess emissions computed in accordance with 40 CFR Part 60 Subpart A § 60.13(h) and Division guidelines, as applicable, any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions and the process operating time during the reporting period [40 CFR Part 60 Subpart A § 60.7(c)(1)].

12.6.1.2 Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted [40 CFR Part 60 Subpart A § 60.7(c)(2)].

12.6.1.3 The date and time identifying each period of equipment (continuous emission monitoring equipment) malfunction and the nature of the system repairs or adjustments, if any, made to correct the malfunction [40 CFR Part 60 Subpart A § 60.7(c)(3)].

12.6.1.4 When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report [40 CFR Part 60 Subpart A § 60.7(c)(4)].

12.6.2 The owner or operator of a facility required to install, maintain, and calibrate continuous monitoring equipment shall submit to the Division, by the end of the calendar month following the end of each calendar quarter, a summary report for that quarter [40 CFR Part 60 Subpart A § 60.7(c)]. One summary report form shall be submitted for each pollutant monitored. This report shall contain the information and be presented in the format provided in 40 CFR Part 60 Subpart A § 60.7(d), Figure 1.

If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and continuous monitoring system

(CMS) downtime is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in Condition 12.6.1 need not be submitted unless required by the Division [40 CFR Part 60 Subpart A § 60.7(d)(1)].

If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in Condition 12.6.1 shall both be submitted [40 CFR Part 60 Subpart A § 60.7(d)(1)].

12.7 Additional Reporting Requirements

With the excess emission reports required by Conditions 12.5 and 12.6, the following additional information shall be provided:

12.7.1 Each 30 day and 90 day rolling average that exceeded or failed to comply with the SO_2 emission limitations (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.17),

12.7.2 All times the coal feeders have started during startup as reported through the continuous emissions monitoring systems (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.17),

12.7.3 A list of the days and hours excluded for any reason from the determination of the permittee's compliance with the SO_2 limits (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.17), and

12.7.4 All excess opacity readings for each unit, the cause of each excess opacity reading and the permittee's efforts to minimize such readings (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.22).

13. Opacity Requirements and Periodic Monitoring

13.1 Visibility SIP Opacity Requirements

13.1.1 Except as provided for in Condition 13.1.2, below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20.0 % opacity, as averaged over each separate 6-minute period within an hour, beginning each hour on the hour, except as provided for in 13.1.2 below, (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.8.ii.(2)).

13.1.2 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, any process modification or adjustment or occasional cleaning of control equipment, which is in excess of 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.8.ii.(2)).

A record shall be kept of the type, date and time of the commencement and completion of each and every condition that results in an exceedance. The records shall be made available for review upon request by the Division.

Compliance with the above opacity requirements shall be monitored using the continuous opacity monitor required by Condition 1.9 of this permit. The requirements for the opacity monitoring system are defined in Conditions 12.1 ((QA/QC Plan), 12.2 (General Provisions) and 12.4 (specific requirements for COMS) of this permit. Periods of excess emissions shall be reported as required by Conditions 12.5 (Unit 1), 12.6 (Unit 2) and 12.7 (additional reporting requirements for both Units 1 and 2).

In addition, an opacity reading may be excused under the provisions of Condition 13.2 of this permit.

13.2 Provisions for Excusing Opacity Readings

Any opacity reading in excess of the limitations set forth in the above condition may be excused if the permittee has demonstrated such reading was the result of an unpredictable failure of air pollution control or process equipment that was not due to poor maintenance, improper or careless operations, or otherwise could not have been prevented through the exercise of reasonable care. If the permittee seeks to excuse any such excess opacity reading, they must notify the Division as soon as possible by telephone, but not later than two hours after the start of the next business day. In addition, any claim of excuse must be made in writing in the

permittee's next quarterly report following such condition and must describe: (a) the date and time telephone notification was given to the Division, and the person to whom the notification was given, (b) the cause of the condition, (c) all actions the permittee took to correct the condition and (d) all actions the permittee will take to prevent the condition from recurring (Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.c.iii).

13.3 NSPS Opacity Requirements - For Unit 2 Only

Opacity of emissions shall not exceed 20% for any six-minute period, except for one six-minute period not to exceed 27% each hour (40 CFR Part 60 Subpart D § 60.42(a)(2), as adopted by reference in Colorado Regulation No. 6, Part A). Compliance with this standard shall be monitored using the continuous opacity monitors (COM) required by this permit.

Note that this opacity standard is more stringent than the opacity standard identified in Condition 13.1 during periods of fire building, cleaning of fire boxes, soot blowing, process modifications, and adjustment and occasional cleaning of control equipment.

14. Lead Periodic Monitoring

Lead emissions from the facility are subject to the General Conditions in Section V of this Permit including Recordkeeping and Reporting requirements and Fee Payment listed under Conditions 22 and 8. Annual emissions for the purposes of APEN reporting and payment of annual fees shall be based on the information submitted in the annual Toxic Release Inventory (TRI) report. The TRI report and calculation methodology shall be made available to the Division upon request.

15. Fuel Sampling Requirements

Coal shall be sampled to determine the heat content, moisture content, weight percent sulfur and weight percent ash. Vendor receipts used for contractual purposes to insure fuel is delivered within specifications shall be adequate to provide the necessary data for the purposes of emission calculations and monitoring compliance with permit conditions. The permittee shall use vendor sample results from all shipments of coal received.

16. B003 – Auxiliary Boiler, 25 MMBtu/hr

Parameter	Permit Condition Number	Limitations		Compliance Emission Factor	Monitoring	
		Short Term	Long Term		Method	Interval
Emission Calculations	16.1.	N/A	N/A	See Condition 16.1.	Recordkeeping and Calculation	Annually
No. 2 Fuel Oil and Natural Gas Consumption	16.2.	N/A	N/A	N/A	Recordkeeping	Annually
Particulate Matter Emissions	16.3.	0.216 lb/MMBtu		N/A	Fuel Restriction	See Condition 16.3
Sulfur Dioxide – **When Burning Fuel Oil Only**	16.4	1.5 lb/MMBtu		N/A	Fuel Restriction	See Condition 16.4.
Fuel Sampling	16.5.	N/A	N/A	N/A	See Condition 16.5.	
Opacity	16.6.	Not to Exceed 20% Except as Provided for in Condition 16.7 Below		N/A	See Condition 16.6.	
		For Certain Operational Activities - Not to Exceed 30%, for a Period or Periods Aggregating More than Six (6) Minutes in any 60 Consecutive Minutes		N/A		
MACT Subpart DDDDD Requirements	16.7.	See Condition 16.7		N/A	See Condition 16.7.	

16.1 The emission factors listed in the table below have been approved by the Division and shall be used to calculate emissions from the boiler (EPA's Compilation of Emission Factors (AP-42), Section 1.3, dated September 1998 – for No. 2 distillate oil and Section 1.4, dated March 1998 for natural gas).

Pollutant	Emission Factor	
	Natural Gas (lb/MMscf)	No. 2 Distillate Oil (lb/10^3 gal)[1]
PM	1.9	2
PM_{10}	1.9	1
SO_2	0.6	144S
NO_X	100	20
CO	84	5
VOC	5.5	0.2

[1]S = weight percent sulfur in fuel

Annual emissions for the purposes of APEN reporting and the payment of annual fees shall be calculated using the above emission factors and the fuel usage, as required by Condition 16.2, in the following equation:

$$\text{tons/yr} = \text{EF}\ \frac{(\text{lbs/MMscf or lbs/}10^3\text{ gal}) \times \text{monthly fuel consumption (MMscf/yr or gal/yr)}}{2000\text{ lbs/ton}}$$

16.2 No. 2 fuel oil and natural gas consumption for the boiler shall be monitored annual and recorded and maintained to be available to the Division upon request. Natural gas and No. 2 fuel oil usage shall be determined using fuel meter and corporate records as necessary.

16.3 Particulate Matter (PM) emissions from the boiler shall not exceed the above limitation (Colorado Regulation No. 1, Section III.A.1.b). In the absence of credible evidence to the contrary, compliance with the particulate matter emission limits is presumed since only No. 2 fuel oil and natural gas are permitted to be used as fuel in the boiler.

Note that the numeric PM standards were determined using the design heat input for the boiler (25 MMBtu/hr) in the following equation:

$PE = 0.5 \times (FI)^{-0.26}$ where: PE = particulate standard in lbs/MMBtu
FI = fuel input in MMBtu/hr

16.4 Sulfur Dioxide (SO_2) emissions from this boiler **when burning No. 2 Fuel Oil** shall not exceed the above limitation (Colorado Regulation No. 1, Section VI.A.3.b.(i)). In the absence of credible evidence to the contrary, compliance with the sulfur dioxide emission limitation is presumed since only No. 2 fuel oil and natural gas are permitted to be used as fuel in the boiler.

16.5 No. 2 fuel oil shall be sampled and analyzed to determine the weight percent sulfur in the fuel. Frequency of sampling and analysis shall be semi-annually or with each fuel shipment, whichever is less frequent. In lieu of sampling, vendor data may be used to determine the weight percent sulfur provided sampling and analysis was performed using appropriate ASTM methods, or equivalent, if approved by the Division in advance.

16.6 The boiler is subject to the following opacity requirements:

16.6.1 Except as provided for in Condition 16.6.1, below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity (Colorado Regulation No. 1, Section II.A.1).

16.6.2 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, process modifications or adjustment or occasional cleaning of control equipment which is in excess of 30% for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4).

Compliance with the opacity requirements shall be monitored as follows:

16.6.3 **When burning natural gas as fuel:** In the absence of credible evidence to the contrary, the boiler shall be presumed to be in compliance with the above opacity requirements whenever natural gas is used as fuel.

16.6.4 **When burning No. 2 distillate oil as fuel** compliance with the opacity requirements shall be monitored as follows:

16.6.4.1 Compliance with the opacity standard in Condition 16.6.2 shall be monitored by conducting emission observations in accordance with EPA Method 9. Readings shall be conducted annually and shall be taken within one (1) hour of the commencement of one of the above specific activities and every 24 hours thereafter until the specific activity has been completed. Note that if the duration of the specific activity lasts less than one hour a Method 9 reading is not required.

16.6.4.2 Compliance with the opacity standard in Condition 16.6.1 shall be monitored by conducting visible emission observations in accordance with EPA Method 9. Readings shall be conducted annually.

16.6.4.3 A visible emissions observation is not required for any annual period where no No. 2 distillate oil has been burned.

16.6.4.4 Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, exceedance of the opacity limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.

16.6.4.5 Results of Method 9 readings and a copy of the certified Method 9 reader's certification shall be made available to the Division upon request.

16.7 This boiler is subject to the requirements in 40 CFR Part 63 Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants from Industrial, Commercial and Institutional Boilers and Process Heaters". Within one (1) year of the compliance date for these requirements, the permittee shall submit an application to modify this permit to incorporate the specific emission limitations and compliance monitoring methods the source has chosen in order to comply with these requirements.

SECTION III - Acid Rain Requirements

1. Designated Representative and Alternate Designated Representative

Designated Representative:

Name: George Hess
Title: General Manager, Power Generation, Colorado
Phone: (303) 571-7282

Alternate Designated Representative:

Name: Gary Magno
Title: Manager Environmental Services - Air Quality Compliance
Phone: (303) 294-2177

2. Sulfur Dioxide Emission Allowances and Nitrogen Oxide Emission Limitations

	2008	2009	2010	2011	2012	2013
Unit 1 - SO_2 Allowances, per 40 CFR Part 73.10(b), Table 2	6014*	6014*	6014*	6014*	6014*	6014*
Unit 1 - NO_x Limits, per 40 CFR Part 76.7	0.46 lbs/MMBtu	0.46 lbs/MMBtu	0.46 lbs/MMBtu	0.46 lbs/MMBtu	0.46 lbs/MMBtu	0.46 lbs/MMBtu
Unit 2 - SO_2 Allowances, per 40 CFR Part 73.10(b), Table 2	9155*	9155*	9155*	9155*	9155*	9155*
Unit 2 - NO_x Limits, per 40 CFR Part 76.7	0.40 lbs/MMBtu	0.40 lbs/MMBtu	0.40 lbs/MMBtu	0.40 lbs/MMBtu	0.40 lbs/MMBtu	0.40 lbs/MMBtu

* Under the provisions of §72.84(a) any allowance allocations to, transfers to and deductions from an affected unit's Allowance Tracking System account is considered an automatic permit amendment and as such no revision to the permit is necessary. Numerical allowances shown in this table are from the 1996 edition of the CFR. Note that one allowance equals one ton of SO_2 emissions.

3. Standard Requirements

Units 1 and 2 of this facility are subject to and the source has certified that they will comply with the following standard conditions.

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 Division 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 Division; 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 source or unit, as appropriate, 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 parts 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 Federal Clean Air 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 source's compliance account (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 affected units at the source; 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 Federal Clean Air Act.
(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
   (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
   (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

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 source that has excess emissions in any calendar year shall submit a proposed offset plan to the Administrator of the U. S. EPA, as required under 40 CFR part 77.
(2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
   (i) Pay without demand, to the Administrator of the U. S. EPA, 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 the Division:
   (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
   (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
   (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
   (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or

72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Federal Clean Air 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 Federal Clean Air 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 source) shall also apply to the owners and operators of such unit.

(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 Federal Clean Air Act.

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

(1) Except as expressly provided in title IV of the Federal Clean Air 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 Federal Clean Air Act, including the provisions of title I of the Federal Clean Air 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 Federal Clean Air 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.

4. Reporting Requirements

Reports shall be submitted to the addresses identified in Appendix D.

Pursuant to 40 CFR Part 75.64 quarterly reports and compliance certification requirements shall be submitted to the Administrator **within 30 days after the end of the calendar quarter**. The contents of these reports shall meet the requirements of 40 CFR 75.64.

Pursuant to 40 CFR Part 75.65 excess emissions of opacity shall be reported to the Division. These reports shall be submitted in a format approved by the Division.

Revisions to this permit shall be made in accordance with 40 CFR Part 72, Subpart H, §§ 72.80 through 72.85 (as adopted by reference in Colorado Regulation 18). Permit modification requests shall be submitted to the Division at the address identified in Appendix D.

Changes to the Designated Representative or Alternate Designated Representative shall be made in accordance with 40 CFR 72.23.

SECTION IV - Permit Shield

Regulation No. 3, 5 CCR 1001-5, Part C, §§ I.A.4, V.D., & XIII.B and § 25-7-114.4(3)(a), C.R.S.

1. Specific Non-Applicable Requirements

Based on the information available to the Division and supplied by the applicant, the following parameters and requirements have been specifically identified as non-applicable to the facility to which this permit has been issued. This shield does not protect the source from any violations that occurred prior to or at the time of permit issuance. In addition, this shield does not protect the source from any violations that occur as a result of any modifications or reconstruction on which construction commenced prior to permit issuance.

Emission Unit Description &Number	Applicable Requirement	Justification
Unit B001	40 CFR Part 60, Subparts D, Da, Db, and Dc (as adopted by reference in Colorado Regulation No. 6, Part A)	These requirements are not applicable as construction commenced prior to August 17, 1971 (D, Da and Db) and the boilers at this facility are not small industrial-commercial-institutional steam generating units (Dc).
Unit B002	40 CFR Part 60, Subparts Da, Db, and Dc (as adopted by reference in Colorado Regulation No. 6, Part A)	These requirements are not applicable as construction commenced prior to September 18, 1978 (Da and Db) and the boilers at this facility are not small industrial-commercial-institutional steam generating units (Dc).
B001 and B002	Colorado Regulation No. 6, Part B, Section II	These requirements are not applicable as construction commenced prior to January 30, 1979.
M001 and M002	40 CFR Part 63, Subpart Q (as adopted by reference in Colorado Regulation No. 8, Part E)	These requirements are not applicable because the cooling towers do not use chromium-based water treatment chemicals.

2. General Conditions

Compliance with this Operating Permit shall be deemed compliance with all applicable requirements specifically identified in the permit and other requirements specifically identified in the permit as not applicable to the source. This permit shield shall not alter or affect the following:

2.1 The provisions of §§ 25-7-112 and 25-7-113, C.R.S., or § 303 of the federal act, concerning enforcement in cases of emergency;

2.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

2.3 The applicable requirements of the federal Acid Rain Program, consistent with § 408(a) of the federal act;

2.4 The ability of the Air Pollution Control Division to obtain information from a source pursuant to § 25-7-111(2)(I), C.R.S., or the ability of the Administrator to obtain information pursuant to § 114 of the federal act;

2.5 The ability of the Air Pollution Control Division to reopen the Operating Permit for cause pursuant to Regulation No. 3, Part C, § XIII.

2.6 Sources are not shielded from terms and conditions that become applicable to the source subsequent to permit issuance.

3. Streamlined Conditions

The following applicable requirements have been subsumed within this operating permit using the pertinent streamlining procedures approved by the U.S. EPA. For purposes of the permit shield, compliance with the listed permit conditions will also serve as a compliance demonstration for purposes of the associated subsumed requirements.

Permit Condition(s)	Streamlined (Subsumed) Requirements
	CEM Requirements
Section II, Conditions 12.1, 12.2, 12.3 & 12.4	Colorado Regulation No. 1, Section IV.A, B and H [general continuous emission monitoring requirements and maintaining a file of continuous emission monitoring records]
Section II, Conditions 12.4.3 & 12.6	Colorado Regulation No. 1, Section IV. F and G [continuous emission monitoring requirements - calibration requirements and excess emission reporting requirements] **for Unit 2 Only**
Section II, Conditions 12.1, 12.2 & 12.4	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section VI.10 [opacity CEM requirements]
	Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.VI.10 [opacity CEM requirements]
Section II, Conditions 12.1, 12.2, 12.3 & 12.4	40 CFR Part 60 Subpart D §§ 60.45(a), (c), (e) & (f) and 40 CFR Part 60 Appendix F, as adopted by reference in Colorado Regulation No. 6, Part A [continuous emission monitoring requirements for subpart D sources and QA/QC requirements for continuous emission monitors] **for Unit 2 Only**
Section II, Condition 12.3	40 CFR Part 60 Subpart A § 60.13 and 40 CFR Part 60 Appendix B, as adopted by reference in Colorado Regulation No. 6, Part A - **for the Unit 2 CEMS only, not the Unit 2 COM** [NSPS general monitoring requirements and performance specifications]
Section II, Condition 1.9	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section VI.9 [install, maintain, calibrate and operate CEMS for SO_2, NO_X, CO_2 and flow]
	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section VI.12.(a) [install, maintain, calibrate and operate SO_2 CEMS on inlet to lime spray dryer]
Section II, Condition 1.10	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section VI.12.(b) [tie coal feeders to SO_2 CEM systems]
Section II, Condition 12.4.5	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section VI.23 [98% data availability on opacity CEMs]

Permit Condition(s)	Streamlined (Subsumed) Requirements
Section II, Conditions 12.3.3.2 & 12.3.4.6 and Section III. 3 – Standard Requirements	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section VI.20 [when CEMs not providing quality-assured data, SO_2 and NO_X data will be replaced using procedures in 40 CFR Part 75]
	Opacity Requirements
Section II, Condition 13.1	Colorado Regulation No. 1, Sections II.A.1 & 4 [20% opacity and 30% opacity requirement for certain operational activities]
	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section V.8.c.ii.(2) [opacity shall not exceed 20.0% and 30% under certain operating conditions] .
	40 CFR Part 60 Subpart a § 60.11(c), as adopted by reference in Colorado Regulation No. 6, Part A [exemption from NSPS opacity requirement during periods of startup, shutdown and malfunction]] **for Unit 2 Only**
Section II, Condition 13.2	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section V.8.c.iii [excusing opacity readings in excess of limitations]
Section II, Condition 13.1 & 13.3	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section V.8.c.v [monitor opacity using a COM]
Section II, Condition 12.4.4	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section VI.21 [calculate opacity based on CEMS data for each six-minute period]
	Particulate Matter Requirements
Section II, Condition 1.1	Colorado Regulation No. 1, Section III.A.1.c [particulate matter emissions shall not exceed 0.1 lbs/MMBtu]
Section II, Condition 1.1	40 CFR Part 60 Subpart D § 60.42(a), as adopted by reference in Colorado Regulation No. 6, Part A [particulate matter emissions shall not exceed 0.1 lbs/MMBtu] **for Unit 2 Only**
	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section V.8.c.ii.(1) [particulate matter shall not exceed 0.03 lbs/MMBtu]
	NO_X Requirements
Section III.2 – NO_X limitations	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section V.8.b.ii.(1) and (2) [NO_X emissions shall not exceed 0.50 lbs/MMBtu (Unit 1) and 0.45 lbs/MMBtu (Unit 2) on a calendar year annual average, except that the Consent Decree provides that more stringent NO_X limitations promulgated as final Colorado or federal regulations shall apply in lieu of these limits. 40 CFR Part 76.7 contains more stringent limits: 0.46 lbs/MMBtu for Unit 1 and 0.40 lbs/MMBtu for Unit 2]
Section III.3 – Standard Requirements	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section V.8.b.iv [monitor NO_X emissions using a CEM]
	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section VI.18 [calculate hourly and quarterly NO_X concentrations in lbs/MMBtu per 40 CFR Part 75]
	SO_2 Requirements
Section II, Condition 1.3.1	40 CFR Part 60 Subpart D § 60.43(a)(2), as adopted by reference in Colorado Regulation No. 6, Part A [SO_2 emissions shall not exceed 1.2 lbs/MMBtu] **for Unit 2 Only**

Permit Condition(s)	Streamlined (Subsumed) Requirements
Section II, Condition 1.3.2	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section V.8.a.ii(1) [0.160 lbs/MMBtu SO_2 on a 30 boiler operating day rolling average]
Section II, Condition 1.3.3	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section V.8.a.ii(2) [0.130 lbs/MMBtu SO_2 on a 90 boiler operating day rolling average]
Section II, Condition 1.3.5 & 1.3.6	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Sections V.8.a.iii & v [monitor compliance with SO_2 limitations using CEMS]
Section II, Condition 1.3.4	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section V.8.a.iv [82% reduction of SO_2 emissions on a 30 day boiler operating day rolling average]
Section II, Conditions 1.3.7, 1.3.8 & 1.3.9	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Sections V.8.a.vi & viii [data exclusions from daily SO_2 emissions]
Section II, Condition 9	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section V.8.a.ix [catastrophic failure requirements]
Section II, Condition 1.11	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section V.8.a.vii [requirements for operating SO_2 control system]
	Data Recording and Reporting
Section II, Condition 12.3.4.1	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section VI.16 [calculate hourly SO_2 concentrations in lbs/MMBtu at the inlet and outlet CEM per 40 CFR Part 75]
Section II, Condition 12.3.4.2	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section VI.16.a. [calculate hourly, daily and 30 boiler operating day rolling percent SO_2 removal]
Section II, Condition 12.3.4.3	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section VI.16.b [calculate daily, 30 and 90 boiler operating day rolling SO_2 emissions]
Section II, Condition 12.3.4.4	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section VI.16.c [first 2 hours after coal feeder has started can be excluded from daily SO_2 emission averages]
Section II, Condition 12.7.1, 12.7.2 & 12.7.3	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section VI.17 [quarterly excess emission reporting for SO_2 30 and 90 boiler operating day averages]
Section II, Condition 12.7.4	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section VI.22 [quarterly excess emission reporting for opacity]
	Additional Consent Decree Requirements
Section II, Conditions 7.1 & 7.2	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Sections II.2.b & x [definitions of boiler operating day and rolling average basis]
Section II, Condition 1.16	Consent Decree, entered by the District Court on August 19, 1996, Civil Action 93-B-1749, Section V.7 [operating requirements for boilers]
	Regional Haze Recordkeeping and Reporting Requirements
Section II, Condition 1.18.1.	Colorado Regulation No. 3, Part F, Section VII.E [ONLY the paragraph related to submittal of semi-annual reports for any excursions under CAM]
Section II, Condition 1.20.5.3	Colorado Regulation No. 3, Part F, Section VII.E [ONLY the paragraph related to submittal of PM performance test results within 60 days]

SECTION V - General Permit Conditions

5/22/12 version

1. Administrative Changes

Regulation No. 3, 5 CCR 1001-5, Part A, § III.

The permittee shall submit an application for an administrative permit amendment to the Division for those permit changes that are described in Regulation No. 3, Part A, § I.B.1. The permittee may immediately make the change upon submission of the application to the Division.

2. Certification Requirements

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.9., V.C.16.a.& e. and V.C.17.

a. Any application, report, document and compliance certification submitted to the Air Pollution Control Division pursuant to Regulation No. 3 or the Operating Permit shall contain a certification by a responsible official of the truth, accuracy and completeness of such form, report or certification stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

b. All compliance certifications for terms and conditions in the Operating Permit shall be submitted to the Air Pollution Control Division at least annually unless a more frequent period is specified in the applicable requirement or by the Division in the Operating Permit.

c. Compliance certifications shall contain:

(i) the identification of each permit term and condition that is the basis of the certification;

(ii) the compliance status of the source;

(iii) whether compliance was continuous or intermittent;

(iv) method(s) used for determining the compliance status of the source, currently and over the reporting period; and

(v) such other facts as the Air Pollution Control Division may require to determine the compliance status of the source.

d. All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.

e. If the permittee is required to develop and register a risk management plan pursuant to § 112(r) of the federal act, the permittee shall certify its compliance with that requirement; the Operating Permit shall not incorporate the contents of the risk management plan as a permit term or condition.

3. Common Provisions

Common Provisions Regulation, 5 CCR 1001-2 §§ II.A., II.B., II.C., II,.E., II.F., II.I, and II.J

a. To Control Emissions Leaving Colorado

When emissions generated from sources in Colorado cross the State boundary line, such emissions shall not cause the air quality standards of the receiving State to be exceeded, provided reciprocal action is taken by the receiving State.

b. Emission Monitoring Requirements

The Division may require owners or operators of stationary air pollution sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division.

c. Performance Testing

The owner or operator of any air pollution source shall, upon request of the Division, conduct performance test(s) and furnish the Division a written report of the results of such test(s) in order to determine compliance with applicable emission control regulations.

Performance test(s) shall be conducted and the data reduced in accordance with the applicable reference test methods unless the Division:

(i) specifies or approves, in specific cases, the use of a test method with minor changes in methodology;

(ii) approves the use of an equivalent method;

(iii) approves the use of an alternative method the results of which the Division has determined to be adequate for indicating where a specific source is in compliance; or

(iv) waives the requirement for performance test(s) because the owner or operator of a source has demonstrated by other means to the Division's satisfaction that the affected facility is in compliance with the standard. Nothing in this paragraph shall be construed to abrogate the Commission's or Division's authority to require testing under the Colorado Revised Statutes, Title 25, Article 7, and pursuant to regulations promulgated by the Commission.

Compliance test(s) shall be conducted under such conditions as the Division shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Division such records as may be necessary to determine the conditions of the performance test(s). Operations during period of startup, shutdown, and malfunction shall not constitute representative conditions of performance test(s) unless otherwise specified in the applicable standard.

The owner or operator of an affected facility shall provide the Division thirty days prior notice of the performance test to afford the Division the opportunity to have an observer present. The Division may waive the thirty day notice requirement provided that arrangements satisfactory to the Division are made for earlier testing.

The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(i) Sampling ports adequate for test methods applicable to such facility;

(ii) Safe sampling platform(s);

(iii) Safe access to sampling platform(s); and

(iv) Utilities for sampling and testing equipment.

Each performance test shall consist of at least three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of results of at least three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other

circumstances beyond the owner or operator's control, compliance may, upon the Division's approval, be determined using the arithmetic mean of the results of the two other runs.

Nothing in this section shall abrogate the Division's authority to conduct its own performance test(s) if so warranted.

d. Affirmative Defense Provision for Excess Emissions during Malfunctions

An affirmative defense to a claim of violation under these regulations is provided to owners and operators for civil penalty actions for excess emissions during periods of malfunction. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of evidence that:

(i) The excess emissions were caused by a sudden, unavoidable breakdown of equipment, or a sudden, unavoidable failure of a process to operate in the normal or usual manner, beyond the reasonable control of the owner or operator;

(ii) The excess emissions did not stem from any activity or event that could have reasonably been foreseen and avoided, or planned for, and could not have been avoided by better operation and maintenance practices;

(iii) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded;

(iv) The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;

(v) All reasonably possible steps were taken to minimize the impact of the excess emissions on ambient air quality;

(vi) All emissions monitoring systems were kept in operation (if at all possible);

(vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence;

(viii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;

(ix) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This section is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement; and

(x) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in the Commissions' Regulations that could be attributed to the emitting source.

The owner or operator of the facility experiencing excess emissions during a malfunction shall notify the division verbally as soon as possible, but no later than noon of the Division's next working day, and shall submit written notification following the initial occurrence of the excess emissions by the end of the source's next reporting period. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to failures to meet federally promulgated performance standards or emission limits, including, but not limited to, new source performance standards and national emission standards for hazardous air pollutants. The affirmative defense provision does not apply to state implementation plan (sip) limits or permit limits that have been set taking into account potential emissions during malfunctions, including, but

not necessarily limited to, certain limits with 30-day or longer averaging times, limits that indicate they apply during malfunctions, and limits that indicate they apply at all times or without exception.

e. Circumvention Clause

A person shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air pollutants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of this regulation. No person shall circumvent this regulation by using more openings than is considered normal practice by the industry or activity in question.

f. Compliance Certifications

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in the Colorado State Implementation Plan, nothing in the Colorado State Implementation Plan shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. Evidence that has the effect of making any relevant standard or permit term more stringent shall not be credible for proving a violation of the standard or permit term.

When compliance or non-compliance is demonstrated by a test or procedure provided by permit or other applicable requirement, the owner or operator shall be presumed to be in compliance or non-compliance unless other relevant credible evidence overcomes that presumption.

g. Affirmative Defense Provision for Excess Emissions During Startup and Shutdown

An affirmative defense is provided to owners and operators for civil penalty actions for excess emissions during periods of startup and shutdown. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of the evidence that:

(i) The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;

(ii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation or maintenance;

(iii) If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(iv) The frequency and duration of operation in startup and shutdown periods were minimized to the maximum extent practicable;

(v) All possible steps were taken to minimize the impact of excess emissions on ambient air quality;

(vi) All emissions monitoring systems were kept in operation (if at all possible);

(vii) The owner or operator's actions during the period of excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence; and,

(viii) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. This subparagraph is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement.

The owner or operator of the facility experiencing excess emissions during startup and shutdown shall notify the Division verbally as soon as possible, but no later than two (2) hours after the start of the next working day, and shall

submit written quarterly notification following the initial occurrence of the excess emissions. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to State Implementation Plan provisions or other requirements that derive from new source performance standards or national emissions standards for hazardous air pollutants, or any other federally enforceable performance standard or emission limit with an averaging time greater than twenty-four hours. In addition, an affirmative defense cannot be used by a single source or small group of sources where the excess emissions have the potential to cause an exceedance of the ambient air quality standards or Prevention of Significant Deterioration (PSD) increments.

In making any determination whether a source established an affirmative defense, the Division shall consider the information within the notification required above and any other information the Division deems necessary, which may include, but is not limited to, physical inspection of the facility and review of documentation pertaining to the maintenance and operation of process and air pollution control equipment.

4. Compliance Requirements

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.C.9., V.C.11. & 16.d. and § 25-7-122.1(2), C.R.S.

a. The permittee must comply with all conditions of the Operating Permit. Any permit noncompliance relating to federally-enforceable terms or conditions constitutes a violation of the federal act, as well as the state act and Regulation No. 3. Any permit noncompliance relating to state-only terms or conditions constitutes a violation of the state act and Regulation No. 3, shall be enforceable pursuant to state law, and shall not be enforceable by citizens under § 304 of the federal act. Any such violation of the federal act, the state act or regulations implementing either statute is grounds for enforcement action, for permit termination, revocation and reissuance or modification or for denial of a permit renewal application.

b. It shall not be a defense for a permittee in an enforcement action or a consideration in favor of a permittee in a permit termination, revocation or modification action or action denying a permit renewal application that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

c. The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of any request by the permittee for a permit modification, revocation and reissuance, or termination, or any notification of planned changes or anticipated noncompliance does not stay any permit condition, except as provided in §§ X. and XI. of Regulation No. 3, Part C.

d. The permittee shall furnish to the Air Pollution Control Division, within a reasonable time as specified by the Division, 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 permittee, including information claimed to be confidential. Any information subject to a claim of confidentiality shall be specifically identified and submitted separately from information not subject to the claim.

e. Any schedule for compliance for applicable requirements with which the source is not in compliance at the time of permit issuance shall be supplemental, and shall not sanction noncompliance with, the applicable requirements on which it is based.

f. For any compliance schedule for applicable requirements with which the source is not in compliance at the time of permit issuance, the permittee shall submit, at least every 6 months unless a more frequent period is specified in the applicable requirement or by the Air Pollution Control Division, progress reports which contain the following:

(i) dates for achieving the activities, milestones, or compliance required in the schedule for compliance, and dates when such activities, milestones, or compliance were achieved; and

(ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

g. The permittee shall not knowingly falsify, tamper with, or render inaccurate any monitoring device or method required to be maintained or followed under the terms and conditions of the Operating Permit.

5. Emergency Provisions

Regulation No. 3, 5 CCR 1001-5, Part C, § VII.E

An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed the technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. "Emergency" does not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. An emergency constitutes an affirmative defense to an enforcement action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates, 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 emission standards, or other requirements in the permit; and

d. the permittee submitted oral notice of the emergency to the Air Pollution Control Division no later than noon of the next working day following the emergency, and followed by written notice within one month of the time when emissions 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.

This emergency provision is in addition to any emergency or malfunction provision contained in any applicable requirement.

6. Emission Controls for Asbestos

Regulation No. 8, 5 CCR 1001-10, Part B

The permittee shall not conduct any asbestos abatement activities except in accordance with the provisions of Regulation No. 8, Part B, “asbestos control.”

7. Emissions Trading, Marketable Permits, Economic Incentives

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.13.

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are specifically provided for in the permit.

8. Fee Payment

C.R.S §§ 25-7-114.1(6) and 25-7-114.7

a. The permittee shall pay an annual emissions fee in accordance with the provisions of C.R.S. § 24-7-114.7. A 1% per month late payment fee shall be assessed against any invoice amounts not paid in full on the 91st day after the date of invoice, unless a permittee has filed a timely protest to the invoice amount.

b. The permittee shall pay a permit processing fee in accordance with the provisions of C.R.S. § 24-7-114.7. If the Division estimates that processing of the permit will take more than 30 hours, it will notify the permittee of its estimate of what the actual charges may be prior to commencing any work exceeding the 30 hour limit.

c. The permittee shall pay an APEN fee in accordance with the provisions of C.R.S. § 24-7-114.1(6) for each APEN or revised APEN filed.

9. Fugitive Particulate Emissions

Regulation No. 1, 5 CCR 1001-3, § III.D.1.

The permittee shall employ such control measures and operating procedures as are necessary to minimize fugitive particulate emissions into the atmosphere, in accordance with the provisions of Regulation No. 1, § III.D.1.

10. Inspection and Entry

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.16.b.

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Air Pollution Control Division, or any authorized representative, to perform the following:

a. enter upon the permittee's premises where an Operating Permit source is located, or emissions-related activity is conducted, or where records must be kept under the terms of the permit;

b. have access to, and copy, at reasonable times, any records that must be kept under the conditions of the permit;

c. inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the Operating Permit;

d. sample or monitor at reasonable times, for the purposes of assuring compliance with the Operating Permit or applicable requirements, any substances or parameters.

11. Minor Permit Modifications

Regulation No. 3, 5 CCR 1001-5, Part C, §§ X. & XI.

The permittee shall submit an application for a minor permit modification before making the change requested in the application. The permit shield shall not extend to minor permit modifications.

12. New Source Review

Regulation No. 3, 5 CCR 1001-5, Part B

The permittee shall not commence construction or modification of a source required to be reviewed under the New Source Review provisions of Regulation No. 3, Part B, without first receiving a construction permit.

13. No Property Rights Conveyed

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.11.d.

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

14. Odor

Regulation No. 2, 5 CCR 1001-4, Part A

As a matter of state law only, the permittee shall comply with the provisions of Regulation No. 2 concerning odorous emissions.

15. Off-Permit Changes to the Source

Regulation No. 3, 5 CCR 1001-5, Part C, § XII.B.

The permittee shall record any off-permit change to the source that causes the emissions of a regulated pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from the change, including any other data necessary to show compliance with applicable ambient air quality standards. The permittee shall provide contemporaneous notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit . The permit shield shall not apply to any off-permit change.

16. Opacity

Regulation No. 1, 5 CCR 1001-3, §§ I., II.

The permittee shall comply with the opacity emissions limitation set forth in Regulation No. 1, §§ I.-II.

17. Open Burning

Regulation No. 9, 5 CCR 1001-11

The permittee shall obtain a permit from the Division for any regulated open burning activities in accordance with provisions of Regulation No. 9.

18. Ozone Depleting Compounds

Regulation No. 15, 5 CCR 1001-17

The permittee shall comply with the provisions of Regulation No. 15 concerning emissions of ozone depleting compounds. Sections I., II.C., II.D., III. IV., and V. of Regulation No. 15 shall be enforced as a matter of state law only.

19. Permit Expiration and Renewal

Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.6., IV.C., V.C.2.

a. The permit term shall be five (5) years. The permit shall expire at the end of its term. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted.

b. Applications for renewal shall be submitted at least twelve months, but not more than 18 months, prior to the expiration of the Operating Permit. An application for permit renewal may address only those portions of the permit that require revision, supplementing, or deletion, incorporating the remaining permit terms by reference from the previous permit. A copy of any materials incorporated by reference must be included with the application.

20. Portable Sources

Regulation No. 3, 5 CCR 1001-5, Part C, § II.D.

Portable Source permittees shall notify the Air Pollution Control Division at least 10 days in advance of each change in location.

21. Prompt Deviation Reporting

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.7.b.

The permittee shall promptly report any deviation from permit requirements, including those attributable to malfunction conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken.

"Prompt" is defined as follows:

a. Any definition of "prompt" or a specific timeframe for reporting deviations provided in an underlying applicable requirement as identified in this permit; or

b. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations will be submitted based on the following schedule:

(i) For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in the applicable regulation) that continue for more than an hour in excess of permit requirements, the report shall be made within 24 hours of the occurrence;

(ii) For emissions of any regulated air pollutant, excluding a hazardous air pollutant or a toxic air pollutant that continue for more than two hours in excess of permit requirements, the report shall be made within 48 hours; and

(iii) For all other deviations from permit requirements, the report shall be submitted every six (6) months, except as otherwise specified by the Division in the permit in accordance with paragraph 22.d. below.

c. If any of the conditions in paragraphs b.i or b.ii above are met, the source shall notify the Division by telephone (303-692-3155) or facsimile (303-782-0278) based on the timetables listed above. *[Explanatory note: Notification by telephone or facsimile must specify that this notification is a deviation report for an Operating Permit.]* A written notice, certified consistent with General Condition 2.a. above (Certification Requirements), shall be submitted within 10 working days of the occurrence. All deviations reported under this section shall also be identified in the 6-month report required above.

"Prompt reporting" does not constitute an exception to the requirements of "Emergency Provisions" for the purpose of avoiding enforcement actions.

22. Record Keeping and Reporting Requirements

Regulation No. 3, 5 CCR 1001-5, Part A, § II.; Part C, §§ V.C.6., V.C.7.

a. Unless otherwise provided in the source specific conditions of this Operating Permit, the permittee shall maintain compliance monitoring records that include the following information:

(i) date, place as defined in the Operating Permit, and time of sampling or measurements;

(ii) date(s) on which analyses were performed;

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

(iv) the analytical techniques or methods used;

(v) the results of such analysis; and

(vi) the operating conditions at the time of sampling or measurement.

b. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information, for this purpose, includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Operating Permit. With prior approval of the Air Pollution Control Division, the permittee may maintain any of the above records in a computerized form.

c. Permittees must retain records of all required monitoring data and support information for the most recent twelve (12) month period, as well as compliance certifications for the past five (5) years on-site at all times. A permittee shall make available for the Air Pollution Control Division's review all other records of required monitoring data and support information required to be retained by the permittee upon 48 hours advance notice by the Division.

d. The permittee shall submit to the Air Pollution Control Division all reports of any required monitoring at least every six (6) months, unless an applicable requirement, the compliance assurance monitoring rule, or the Division requires submission on a more frequent basis. All instances of deviations from any permit requirements must be clearly identified in such reports.

e. The permittee shall file an Air Pollutant Emissions Notice ("APEN") prior to constructing, modifying, or altering any facility, process, activity which constitutes a stationary source from which air pollutants are or are to be emitted, unless such source is exempt from the APEN filing requirements of Regulation No. 3, Part A, § II.D. A revised APEN shall be filed annually whenever a significant change in emissions, as defined in Regulation No. 3, Part A, § II.C.2., occurs; whenever there is a change in owner or operator of any facility, process, or activity; whenever new control equipment is installed; whenever a different type of control equipment replaces an existing type of control equipment; whenever a permit limitation must be modified; or before the APEN expires. An APEN is valid for a period of five years. The five-year period recommences when a revised APEN is received by the Air Pollution Control Division. Revised APENs shall be submitted no later than 30 days before the five-year term expires. Permittees submitting revised APENs to inform the Division of a change in actual emission rates must do so by April 30 of the following year. Where a permit revision is required, the revised APEN must be filed along with a request for permit revision. APENs for changes in control equipment must be submitted before the change occurs. Annual fees are based on the most recent APEN on file with the Division.

23. Reopenings for Cause

Regulation No. 3, 5 CCR 1001-5, Part C, § XIII.

a. The Air Pollution Control Division shall reopen, revise, and reissue Operating Permits; permit reopenings and reissuance shall be processed using the procedures set forth in Regulation No. 3, Part C, § III., except that proceedings to reopen and reissue permits affect only those parts of the permit for which cause to reopen exists.

b. The Division shall reopen a permit whenever additional applicable requirements become applicable to a major source with a remaining permit term of three or more years, unless the effective date of the requirements is later than the date on which the permit expires, or unless a general permit is obtained to address the new requirements; whenever additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program; whenever the Division determines 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; or whenever the Division determines that the permit must be revised or revoked to assure compliance with an applicable requirement.

c. The Division shall provide 30 days' advance notice to the permittee of its intent to reopen the permit, except that a shorter notice may be provided in the case of an emergency.

d. The permit shield shall extend to those parts of the permit that have been changed pursuant to the reopening and reissuance procedure.

24. Section 502(b)(10) Changes

Regulation No. 3, 5 CCR 1001-5, Part C, § XII.A.

The permittee shall provide a minimum 7-day advance notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permittee shall attach a copy of each such notice given to its Operating Permit.

25. Severability Clause

Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.10.

In the event of a challenge to any portion of the permit, all emissions limits, specific and general conditions, monitoring, record keeping and reporting requirements of the permit, except those being challenged, remain valid and enforceable.

26. Significant Permit Modifications

Regulation No. 3, 5 CCR 1001-5, Part C, § III.B.2.

The permittee shall not make a significant modification required to be reviewed under Regulation No. 3, Part B ("Construction Permit" requirements) without first receiving a construction permit. The permittee shall submit a complete Operating Permit application or application for an Operating Permit revision for any new or modified source within twelve months of commencing operation, to the address listed in Item 1 in Appendix D of this permit. If the permittee chooses to use the "Combined Construction/Operating Permit" application procedures of Regulation No. 3, Part C, then the Operating Permit must be received prior to commencing construction of the new or modified source.

27. Special Provisions Concerning the Acid Rain Program

Regulation No. 3, 5 CCR 1001-5, Part C, §§ V.C.1.b. & 8

a. Where an applicable requirement of the federal act is more stringent than an applicable requirement of regulations promulgated under Title IV of the federal act, 40 Code of Federal Regulations (CFR) Part 72, both provisions shall be incorporated into the permit and shall be federally enforceable.

b. Emissions exceeding any allowances that the source lawfully holds under Title IV of the federal act or the regulations promulgated thereunder, 40 CFR Part 72, are expressly prohibited.

28. Transfer or Assignment of Ownership

Regulation No. 3, 5 CCR 1001-5, Part C, § II.C.

No transfer or assignment of ownership of the Operating Permit source will be effective unless the prospective owner or operator applies to the Air Pollution Control Division on Division-supplied Administrative Permit Amendment forms, for reissuance of the existing Operating Permit. No administrative permit shall be complete until a written agreement containing a specific date for transfer of permit, responsibility, coverage, and liability between the permittee and the prospective owner or operator has been submitted to the Division.

29. Volatile Organic Compounds

Regulation No. 7, 5 CCR 1001-9, §§ III & V.

The requirements in paragraphs 1, b and e apply to sources located in an ozone non-attainment area or the Denver 1-hour ozone attainment/maintenance area. The requirements in paragraphs c and d apply statewide.

a. All storage tank gauging devices, anti-rotation devices, accesses, seals, hatches, roof drainage systems, support structures, and pressure relief valves shall be maintained and operated to prevent detectable vapor loss except when opened, actuated, or used for necessary and proper activities (e.g. maintenance). Such opening, actuation, or use shall be limited so as to minimize vapor loss.

   Detectable vapor loss shall be determined visually, by touch, by presence of odor, or using a portable hydrocarbon analyzer. When an analyzer is used, detectable vapor loss means a VOC concentration exceeding 10,000 ppm. Testing shall be conducted as in Regulation No. 7, Section VIII.C.3.

b. Except when otherwise provided by Regulation No. 7, all volatile organic compounds, excluding petroleum liquids, transferred to any tank, container, or vehicle compartment with a capacity exceeding 212 liters (56 gallons), shall be transferred using submerged or bottom filling equipment. For top loading, the fill tube shall reach within six inches of the bottom of the tank compartment. For bottom-fill operations, the inlet shall be flush with the tank bottom.

c. The permittee shall not dispose of volatile organic compounds by evaporation or spillage unless Reasonably Available Control Technology (RACT) is utilized.

d. No owner or operator of a bulk gasoline terminal, bulk gasoline plant, or gasoline dispensing facility as defined in Colorado Regulation No. 7, Section VI, shall permit gasoline to be intentionally spilled, discarded in sewers, stored in open containers, or disposed of in any other manner that would result in evaporation.

e. Beer production and associated beer container storage and transfer operations involving volatile organic compounds with a true vapor pressure of less than 1.5 PSIA actual conditions are exempt from the provisions of paragraph b, above.

30. Wood Stoves and Wood burning Appliances

Regulation No. 4, 5 CCR 1001-6

The permittee shall comply with the provisions of Regulation No. 4 concerning the advertisement, sale, installation, and use of wood stoves and wood burning appliances.

OPERATING PERMIT APPENDICES

A - INSPECTION INFORMATION
B - MONITORING AND PERMIT DEVIATION REPORT
C - COMPLIANCE CERTIFICATION REPORT
D - NOTIFICATION ADDRESSES
E - PERMIT ACRONYMS
F - PERMIT MODIFICATIONS
G - COMPLIANCE ASSURANCE MONITORING PLAN

*DISCLAIMER:

None of the information found in these Appendices shall be considered to be State or Federally enforceable, except as otherwise provided in the permit, and is presented to assist the source, permitting authority, inspectors, and citizens.

APPENDIX A - Inspection Information

Directions to Plant:

This facility is located at 13125 U.S. Highway 40, 4 miles east of Hayden.

Safety Equipment Required:

Eye Protection
Hard Hat
Safety Shoes
Hearing Protection

Facility Plot Plan:

Figure 1 (following page) shows the plot plan as submitted on February 15, 1996 with the source's Title V Operating Permit Application.

List of Insignificant Activities:

The following list of insignificant activities was provided by the source to assist in the understanding of the facility layout. Since there is no requirement to update such a list, activities may have changed since the last filing.

<u>Units with emissions less than APEN de minimis - criteria pollutants (Reg 3 Part C.II.E.3.a)</u>

Solvent Cold Cleaners (VOC emissions < 2 tpy)
Boiler Steam Vents - emit VOC from injection of VOCs as treatment chemicals (< 2 tpy of VOC used)
Gravel Pit Activities for Onsite Gravel Use (PM and PM_{10} emissions < 2 tons/yr)

<u>Units with emissions less than APEN de minimis - non-criteria reportable pollutants (Reg 3 Part C.II.E.3.b)</u>

Sulfuric acid tank, 12,000 gal above ground
Three (3) 6,500 gallon 12.5 % sodium hypochlorite (bleach) tanks
Fluorescent lamp crusher

<u>In-house experimental and analytical laboratory equipment (Reg 3 Part C.II.E.3.i)</u>

Plant Laboratory

<u>Fuel (gaseous) burning equipment < 5 MMBtu/hr (Reg 3 Part C.II.E.3.k)</u>

Propane Portable Heaters

Welding, soldering and brazing operations using no lead-based compounds (Reg 3 Part C.II.E.3.r)

Maintenance Welding Machine

Chemical storage tanks or containers < 500 gal (Reg 3 Part C.II.E.3.n)

Oxygen scavenger chemical feed tank, 100 gal
Two (2) Phosphate chemical feed tanks, 200 gal
One (1) sodium hydroxide tank, 330 gal

Battery recharging areas (Reg 3 Part C.II.E.3.t)

Battery Storage Areas (3)

Landscaping and site housekeeping devices < 10 hp (Reg 3 Part C.II.E.3.bb)

Mowers, Snowblowers, Weedeaters, etc.

Fugitive emissions from landscaping activities (Reg 3 Part C.II.E.3.cc)

Operations involving acetylene, butane, propane or other flame cutting torches (Reg 3 Part C.II.E.3.kk)

Portable Welding Torches

Chemical storage areas < 5,000 gal capacity (Reg 3 Part C.II.E.3.mm)

Oil Drum Storage Area
Water Treatment Building

Emissions of air pollutants which are not criteria or non-criteria reportable pollutants (Reg 3 Part C.II.E.3.oo)

Sewage Treatment Plant (no VOC emissions)
Storm water runoff ponds
Raw water storage reservoir
Treated water pond
Fire protection collection tank (Unit 1), 25,000 gal underground
Fire protection collection tank (Unit 2), 30,000 gal underground
Bearing cooling water head tank, 260 gal
Condensate storage 1A, 6,530 gal
Condensate storage 1B, 6,530 gal
Condensate storage 2A, 50,000 gal
Condensate storage 2B, 50,000 gal

Potable water storage tank, 5,200 gal
Chem lab deionized water storage tank, 20 gal
Ash water storage tanks
6,000 gallon scale inhibitor tank

Janitorial activities and products (Reg 3 Part C.II.E.3.pp)

Office emissions including cleaning, copying, and restrooms (Reg 3 Part C.II.E.3.tt)

Lubricating/Waste oil storage tanks < 40,000 gal (Reg 3 Part C.II.E.3.aaa)

Turbine lube oil reservoir (Unit 1), 3,000 gal above ground
Turbine lube oil tank 1A (Unit 1), 2,100 gal above ground
Turbine lube oil tank 1B (Unit 1), 4,500 gal above ground
Turbine lube oil tank 1C (Unit 1), 4,500 gal above ground
Turbine lube oil reservoir (Unit 2), 3,500 gal above ground
Turbine lube oil tank 2A (Unit 2), 5,500 gal above ground
Turbine lube oil tank 2B (Unit 3), 5,500 gal above ground
Waste oil tank, 600 gal above ground
Convault waste oil tank, 2,000 gal above ground
Transformer oil (Unit 1), 25,000 gal underground
Transformer oil (Unit 2), 30,000 gal underground
Turbine seal oil tank (Unit 2), 300 gal above ground
Electro-hydraulic fluid tank, 300 gal above ground
Transformer oil (Unit 1), 25,000 gal underground
Transformer oil (Unit 2), 30,000 gal underground

Fuel storage and dispensing equipment in ozone attainment areas throughput < 400 gal/day averaged over 30 days (Reg 3 Part C.II.E.3.ccc)

Gasoline storage tank (regular), 6,000 gal underground
Emergency fire pump fuel tank, 525 gal above ground
Forklift refueling tank (regular) 500 gal

Storage tanks with annual throughput less than 400,000 gal/yr and meeting content specifications (Reg 3 Part C.II.E.3.fff)

Fuel oil bulk storage tank, 250,000 gal above ground
Convault diesel fuel tank, 5,200 gal above ground
Fuel oil day tank (Units 1 and 2), 15,000 gal underground
Coal handling #1 diesel fuel tank, 1,000 gal underground
Coal handling #2 diesel fuel tank, 8,000 gal underground
Emergency generator diesel fuel tank, 1,000 gal aboveground

Emergency Power Generators - limited hours or size (Reg 3 Part C.II.E.3.nnn)

2 – 228 hp diesel emergency generator engines

Stationary Internal Combustion Engines – limited hours or size (Reg 3, Part C.II.E.3.xxx)

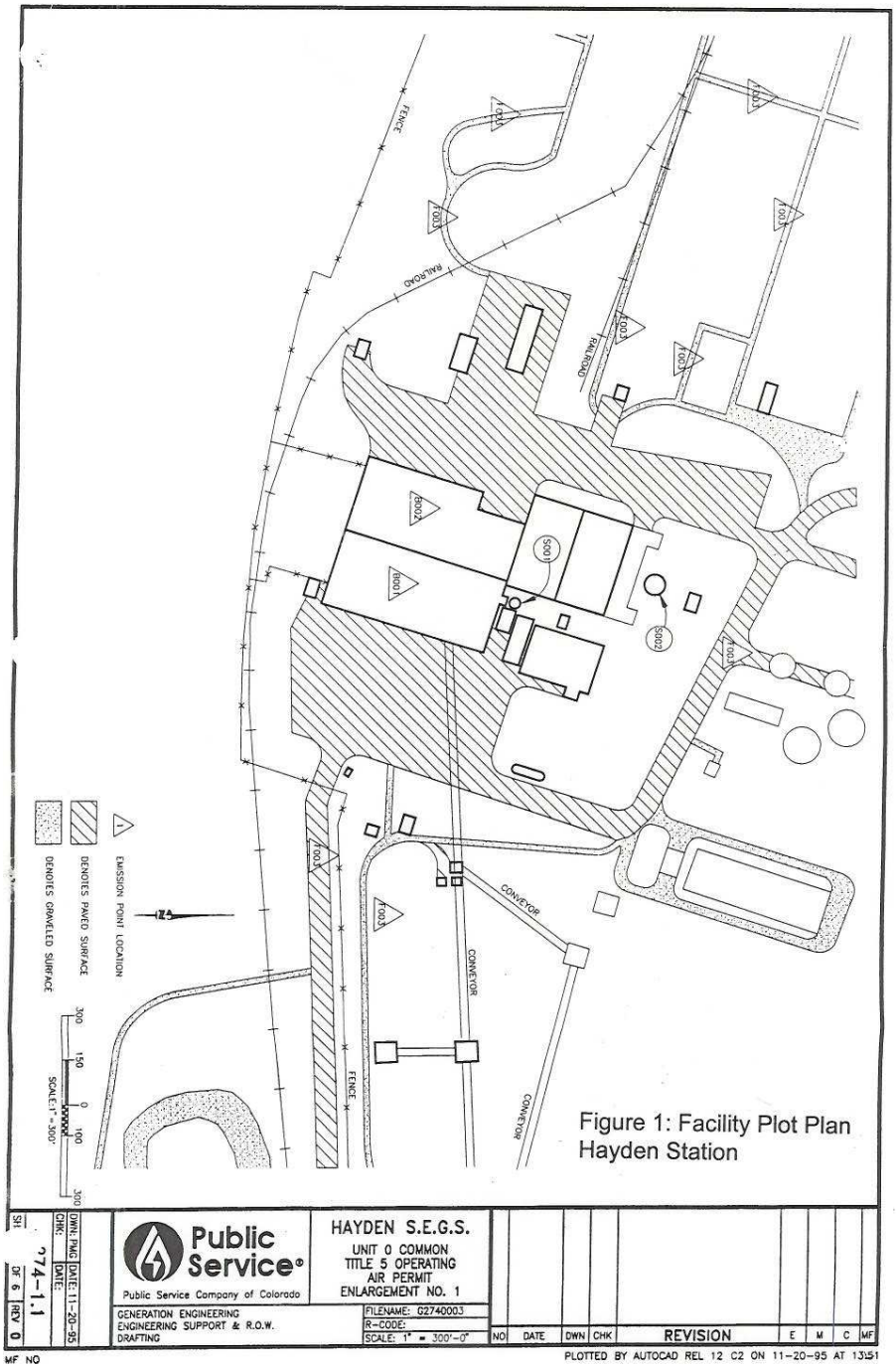
368 hp diesel emergency fire pump

Sandblast equipment where blast media is recycled and blasted material is collected (Reg 3 Part C.II.E.3.www)

Sandblasting Machine

Not sources of emissions

Anhydrous ammonia tank, 30,000 gal above ground (empty)
Hydrogen tanks, 22 at 1,300 cu. ft. each, for generator cooling (tanks not vented, no emissions)
Hydrogen tanks, 6 at 3,467 cu. ft. each, for generator cooling (tanks not vented, no emissions)


FENCE
RAILROAD
RAILROAD
CONVEYOR
CONVEYOR
CONVEYOR
FENCE
S001
S002
F001
F002
F003
F004
F005
F006
F007
F008
F009
F010
F011
EMISSION POINT LOCATION
DENOTES PAVED SURFACE
DENOTES GRAVELED SURFACE
SCALE: 1" = 300'
300 150 0 100 300
Figure 1: Facility Plot Plan
Hayden Station
Public Service®
Public Service Company of Colorado
HAYDEN S.E.G.S.
UNIT 0 COMMON
TITLE 5 OPERATING
AIR PERMIT
ENLARGEMENT NO. 1
GENERATION ENGINEERING
ENGINEERING SUPPORT & R.O.W.
DRAFTING
FILENAME: G2740003
R-CODE:
SCALE: 1" = 300'-0"
DWN: PMG
DATE: 11-20-95
CHK:
DATE:
SH 1 OF 6
REV 0
774-1.1
MF NO
NO DATE DWN CHK REVISION E M C MF
PLOTTED BY AUTOCAD REL 12 C2 ON 11-20-95 AT 13:51

APPENDIX B

Reporting Requirements and Definitions

no codes ver 2/20/07

Please note that, pursuant to 113(c)(2) of the federal Clean Air Act, any person who knowingly:

(A) makes any false material statement, representation, or certification in, or omits material information from, or knowingly alters, conceals, or fails to file or maintain any notice, application, record, report, plan, or other document required pursuant to the Act to be either filed or maintained (whether with respect to the requirements imposed by the Administrator or by a State);

(B) fails to notify or report as required under the Act; or

(C) falsifies, tampers with, renders inaccurate, or fails to install any monitoring device or method required to be maintained or followed under the Act shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 2 years, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

The permittee must comply with all conditions of this operating permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

The Part 70 Operating Permit program requires three types of reports to be filed for all permits.
All required reports must be certified by a responsible official.

Report #1: Monitoring Deviation Report (due at least every six months)

For purposes of this operating permit, the Division is requiring that the monitoring reports are due every six months unless otherwise noted in the permit. All instances of deviations from permit monitoring requirements must be clearly identified in such reports.

For purposes of this operating permit, monitoring means any condition determined by observation, by data from any monitoring protocol, or by any other monitoring which is required by the permit as well as the recordkeeping associated with that monitoring. This would include, for example, fuel use or process rate monitoring, fuel analyses, and operational or control device parameter monitoring.

Report #2: Permit Deviation Report (must be reported "promptly")

In addition to the monitoring requirements set forth in the permits as discussed above, each and every requirement of the permit is subject to deviation reporting. The reports must address deviations from permit

requirements, including those attributable to upset conditions and malfunctions as defined in this Appendix, the probable cause of such deviations, and any corrective actions or preventive measures taken. All deviations from any term or condition of the permit are required to be summarized or referenced in the annual compliance certification.

For purposes of this operating permit, "malfunction" shall refer to both emergency conditions and malfunctions. Additional discussion on these conditions is provided later in this Appendix.

For purposes of this operating permit, the Division is requiring that the permit deviation reports are due as set forth in General Condition 21. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. For example, quarterly Excess Emission Reports required by an NSPS or Regulation No. 1, Section IV.

In addition to the monitoring deviations discussed above, included in the meaning of deviation for the purposes of this operating permit are any of the following:

(1) A situation where emissions exceed an emission limitation or standard contained in the permit;

(2) A situation where process or control device parameter values demonstrate that an emission limitation or standard contained in the permit has not been met;

(3) A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit; or,

(4) A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only if the emission point is subject to CAM)

For reporting purposes, the Division has combined the Monitoring Deviation Report with the Permit Deviation Report.

Report #3: Compliance Certification (annually, as defined in the permit)

Submission of compliance certifications with terms and conditions in the permit, including emission limitations, standards, or work practices, is required not less than annually.

Compliance Certifications are intended to state the compliance status of each requirement of the permit over the certification period. They must be based, at a minimum, on the testing and monitoring methods specified in the permit that were conducted during the relevant time period. In addition, if the owner or operator knows of other material information (i.e. information beyond required monitoring that has been specifically assessed in relation to how the information potentially affects compliance status), that information must be identified and addressed in the compliance certification. The compliance certification must include the following:

- The identification of each term or condition of the permit that is the basis of the certification;

- Whether or not the method(s) used by the owner or operator for determining the compliance status with each permit term and condition during the certification period was the method(s) specified in the permit. Such methods and other means shall include, at a minimum, the methods and means required in the permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Clean Air Act, which prohibits knowingly making a false certification or omitting material information;

- The status of compliance with the terms and conditions of the permit, and whether compliance was continuous or intermittent. The certification shall identify each deviation and take it into account in the compliance certification. Note that not all deviations are considered violations.[1]

- Such other facts as the Division may require, consistent with the applicable requirements to which the source is subject, to determine the compliance status of the source.

The Certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only for emission points subject to CAM)

Note the requirement that the certification shall identify each deviation and take it into account in the compliance certification. Previously submitted deviation reports, including the deviation report submitted at the time of the annual certification, may be referenced in the compliance certification.

Startup, Shutdown, Malfunctions and Emergencies

Understanding the application of Startup, Shutdown, Malfunctions and Emergency Provisions, is very important in both the deviation reports and the annual compliance certifications.

Startup, Shutdown, and Malfunctions

Please note that exceedances of some New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) standards that occur during Startup, Shutdown or Malfunctions may not be considered to be non-compliance since emission limits or standards often do not apply unless specifically stated in the NSPS. Such exceedances must, however, be reported as excess emissions per the NSPS/MACT rules and would still be noted in the deviation report. In regard to compliance certifications, the permittee should be confident of the information related to those deviations when making compliance determinations since they are subject to Division review. The concepts of Startup, Shutdown and Malfunctions also exist for Best Available Control Technology (BACT) sources, but are not applied in the same fashion as for NSPS and MACT sources.

Emergency Provisions

[1] For example, given the various emissions limitations and monitoring requirements to which a source may be subject, a deviation from one requirement may not be a deviation under another requirement which recognizes an exception and/or special circumstances relating to that same event.

Under the Emergency provisions of Part 70, certain operational conditions may act as an affirmative defense against enforcement action if they are properly reported.

DEFINITIONS

Malfunction (NSPS) means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Malfunction (SIP) means any sudden and unavoidable failure of air pollution control equipment or process equipment or unintended failure of a process to operate in a normal or usual manner. Failures that are primarily caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

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.

Monitoring and Permit Deviation Report - Part I

1. Following is the **required** format for the Monitoring and Permit Deviation report to be submitted to the Division as set forth in General Condition 21. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.

2. Part II of this Appendix B shows the format and information the Division will require for describing periods of monitoring and permit deviations, or malfunction or emergency conditions as indicated in the Table below. One Part II Form must be completed for each Deviation. Previously submitted reports (e.g. EER's or malfunctions) may be referenced and the form need not be filled out in its entirety.

FACILITY NAME: Public Service Company – Hayden Station
OPERATING PERMIT NO: 96OPRO132
REPORTING PERIOD:_____ (see first page of the permit for specific reporting period and dates)

Operating Permit Unit ID	Unit Description	Deviations noted During Period?[1]		Malfunction/ Emergency Condition Reported During Period?	
		YES	NO	YES	NO
B001	Boiler No. 1, Riley-Stoker, Model No. 2489, Serial No. 3447, Front-Fired Boiler, Rated at 1,963 MMBtu/hr. Coal-Fired, with Natural Gas and No. 2 Fuel Oil Used for Startup, Shutdown and/or Flame Stabilization.				
B002	Boiler No. 2, Combustion Engineering, Model and Serial No. 1337, Tangentially Fired Boiler, Rated at 2,712 MMBtu/hr. Coal-Fired with No. 2 Fuel Oil Used for Startup, Shutdown and/or Flame Stabilization.				
F001	Fugitive Particulate Emissions from Coal Handling and Storage (Truck Unloading, Storage Pile and Coal Dozing)				
F002	Fugitive Particulate Emissions from Ash Handling and Disposal				
F003	Fugitive Particulate Emissions from Paved and Unpaved Roads				
F004	New Rail Car Unloader, Associated Conveyor and Lowering Well				
P001	Ash Silo				
P002	Coal Handling System (Conveying and Crushing)				
P003	Two (2) Recycle Ash Silos				
P004	Two (2) Recycle Mixers				
P005	Two (2) Lime Silos				
P006	Two (2) Ball Mill Slakers				
P007	Two (2) New Crushers				
M001	Cooling Tower for Unit No. 1, Rated at 84,000 GPM				
M002	Cooling Tower for Unit No. 2 - Rated at 134,000 GPM				
B003	Kewanee Wet-Back Scotch Boiler, Type LW-892-01, Serial No. 9367, Rated at 25 MMBtu/hr. Natural Gas and No. 2 Fuel Oil-Fired.				

Operating Permit Unit ID	Unit Description	Deviations noted During Period?[1]		Malfunction/ Emergency Condition Reported During Period?	
		YES	NO	YES	NO
	General Conditions				
	Insignificant Activities				

[1] See previous discussion regarding what is considered to be a deviation. Determination of whether or not a deviation has occurred shall be based on a reasonable inquiry using readily available information.

Monitoring and Permit Deviation Report - Part II

FACILITY NAME: Public Service Company – Hayden Station
OPERATING PERMIT NO: 96OPRO132
REPORTING PERIOD:

Is the deviation being claimed as an: Emergency _____ Malfunction _____ N/A _____

(For NSPS/MACT) Did the deviation occur during: Startup _____ Shutdown _____ Malfunction _____
Normal Operation _____

OPERATING PERMIT UNIT IDENTIFICATION:

Operating Permit Condition Number Citation

Explanation of Period of Deviation

Duration (start/stop date & time)

Action Taken to Correct the Problem

Measures Taken to Prevent a Reoccurrence of the Problem

Dates of Malfunctions/Emergencies Reported (if applicable)

Deviation Code (for Division Use Only)

SEE EXAMPLE ON THE NEXT PAGE

EXAMPLE

FACILITY NAME: Acme Corp.
OPERATING PERMIT NO: 96OPZZXXX
REPORTING PERIOD: 1/1/06 - 6/30/06

Is the deviation being claimed as an: Emergency _____ Malfunction __XX____ N/A ____

(For NSPS/MACT) Did the deviation occur during: Startup _____ Shutdown _____ Malfunction ____
Normal Operation _____

OPERATING PERMIT UNIT IDENTIFICATION:

Asphalt Plant with a Scrubber for Particulate Control - Unit XXX

Operating Permit Condition Number Citation

Section II, Condition 3.1 - Opacity Limitation

Explanation of Period of Deviation

Slurry Line Feed Plugged

Duration

START- 1730 4/10/06
END- 1800 4/10/06

Action Taken to Correct the Problem

Line Blown Out

Measures Taken to Prevent Reoccurrence of the Problem

Replaced Line Filter

Dates of Malfunction/Emergencies Reported (if applicable)

5/30/06 to A. Einstein, APCD

Deviation Code (for Division Use Only)

Monitoring and Permit Deviation Report - Part III

REPORT CERTIFICATION

SOURCE NAME: Public Service Company – Hayden Station

FACILITY IDENTIFICATION NUMBER: 1070001

PERMIT NUMBER: 96OPRO132

REPORTING PERIOD:_____ (see first page of the permit for specific reporting period and dates)

All information for the Title V Semi-Annual Deviation Reports must be certified by a responsible official as defined in Colorado Regulation No. 3, Part A, Section I.B.38. This signed certification document must be packaged with the documents being submitted.

STATEMENT OF COMPLETENESS

I have reviewed the information being submitted in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this submittal are true, accurate and complete.

Please note that the Colorado Statutes state that any person who knowingly, as defined in Sub-Section 18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this document is guilty of a misdemeanor and may be punished in accordance with the provisions of Sub-Section 25-7 122.1, C.R.S.

_____

Printed or Typed Name | Title

_____

Signature | Date Signed

Note: Deviation reports shall be submitted to the Division at the address given in Appendix D of this permit. No copies need be sent to the U.S. EPA.

APPENDIX C

Required Format for Annual Compliance Certification Report

no codes ver 2/20/07

Following is the format for the Compliance Certification report to be submitted to the Division and the U.S. EPA annually based on the effective date of the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.

FACILITY NAME: Public Service Company – Hayden Station

OPERATING PERMIT NO: 96OPRO132
REPORTING PERIOD:

I. Facility Status

___ During the entire reporting period, this source was in compliance with **ALL** terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference. The method(s) used to determine compliance is/are the method(s) specified in the Permit.

___ With the possible exception of the deviations identified in the table below, this source was in compliance with all terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference, during the entire reporting period. The method used to determine compliance for each term and condition is the method specified in the Permit, unless otherwise indicated and described in the deviation report(s). Note that not all deviations are considered violations.

Operating Permit Unit ID	Unit Description	Deviations Reported [1]		Monitoring Method per Permit?[2]		Was Compliance Continuous or Intermittent[3]	
		Previous	Current	YES	NO	Continuous	Intermittent
B001	Boiler No. 1, Riley-Stoker, Model No. 2489, Serial No. 3447, Front-Fired Boiler, Rated at 1,963 MMBtu/hr. Coal-Fired, with Natural Gas and No. 2 Fuel Oil Used for Startup, Shutdown and/or Flame Stabilization.						
B002	Boiler No. 2, Combustion Engineering, Model and Serial No. 1337, Tangentially Fired Boiler, Rated at 2,712 MMBtu/hr. Coal-Fired with No. 2 Fuel Oil Used for Startup, Shutdown and/or Flame Stabilization.						
F001	Fugitive Particulate Emissions from Coal Handling and Storage (Truck Unloading, Storage Pile and Coal Dozing)						

Operating Permit Unit ID	Unit Description	Deviations Reported [1]		Monitoring Method per Permit?[2]		Was Compliance Continuous or Intermittent[3]	
		Previous	Current	YES	NO	Continuous	Intermittent
F002	Fugitive Particulate Emissions from Ash Handling and Disposal						
F003	Fugitive Particulate Emissions from Paved and Unpaved Roads						
F004	New Rail Car Unloader, Associated Conveyor and Lowering Well						
P001	Ash Silo						
P002	Coal Handling System (Conveying and Crushing)						
P003	Two (2) Recycle Ash Silos						
P004	Two (2) Recycle Mixers						
P005	Two (2) Lime Silos						
P006	Two (2) Ball Mill Slakers						
P007	Two (2) New Crushers						
M001	Cooling Tower for Unit No. 1, Rated at 84,000 GPM						
M002	Cooling Tower for Unit No. 2 - Rated at 134,000 GPM						
B003	Kewanee Wet-Back Scotch Boiler, Type LW-892-01, Serial No. 9367, Rated at 25 MMBtu/hr. Natural Gas and No. 2 Fuel Oil-Fired.						
	General Conditions						
	Insignificant Activities [4]						

[1] If deviations were noted in a previous deviation report, put an "X" under "previous". If deviations were noted in the current deviation report (i.e. for the last six months of the annual reporting period), put an "X" under "current". Mark both columns if both apply.

[2] Note whether the method(s) used to determine the compliance status with each term and condition was the method(s) specified in the permit. If it was not, mark "no" and attach additional information/explanation.

[3] Note whether the compliance status with of each term and condition provided was continuous or intermittent. "Intermittent Compliance" can mean either that noncompliance has occurred or that the owner or operator has data sufficient to certify compliance only on an intermittent basis. Certification of intermittent compliance therefore does not necessarily mean that any noncompliance has occurred.

NOTE:

The Periodic Monitoring requirements of the Operating Permit program rule are intended to provide assurance that even in the absence of a continuous system of monitoring the Title V source can demonstrate whether it has operated in continuous compliance for the duration of the reporting period. Therefore, if a source 1) conducts all of the monitoring and recordkeeping required in its permit, even if such activities are done periodically and not continuously, and if 2) such monitoring and recordkeeping does not indicate non-compliance, and if 3) the Responsible Official is not aware of any credible evidence that indicates non-compliance, then

the Responsible Official can certify that the emission point(s) in question were in continuous compliance during the applicable time period.

[4] Compliance status for these sources shall be based on a reasonable inquiry using readily available information.

II. Status for Accidental Release Prevention Program:

A. This facility _____ is subject _____ is not subject to the provisions of the Accidental Release Prevention Program (Section 112(r) of the Federal Clean Air Act)

B. If subject: The facility _____ is _____ is not in compliance with all the requirements of section 112(r).

1. A Risk Management Plan _____ will be _____ has been submitted to the appropriate authority and/or the designated central location by the required date.

III. Certification

All information for the Title V Semi-Annual Deviation Reports must be certified by a responsible official as defined in Colorado Regulation No. 3, Part A, Section I.B.38. This signed certification document must be packaged with the documents being submitted.

I have reviewed this certification in its entirety and, based on information and belief formed after reasonable inquiry, I certify that the statements and information contained in this certification are true, accurate and complete.

Please note that the Colorado Statutes state that any person who knowingly, as defined in § 18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this document is guilty of a misdemeanor and may be punished in accordance with the provisions of § 25-7 122.1, C.R.S.

_____

Printed or Typed Name Title

_____

Signature Date Signed

NOTE: All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.

APPENDIX D

Notification Addresses

1. **Air Pollution Control Division**

Colorado Department of Public Health and Environment
Air Pollution Control Division
Operating Permits Unit
APCD-SS-B1
4300 Cherry Creek Drive S.
Denver, CO 80246-1530

ATTN: Matt Burgett

2. **United States Environmental Protection Agency**

Compliance Notifications:

Office of Enforcement, Compliance and Environmental Justice
Mail Code 8ENF-T
U.S. Environmental Protection Agency, Region VIII
1595 Wynkoop Street
Denver, CO 80202-1129

Permit Modifications, Off Permit Changes:

Office of Partnerships and Regulatory Assistance
Air and Radiation Programs, 8P-AR
U.S. Environmental Protection Agency, Region VIII
1595 Wynkoop Street
Denver, CO 80202-1129

APPENDIX E

Permit Acronyms

Listed Alphabetically:

AIRS -	Aerometric Information Retrieval System
AP-42 -	EPA Document Compiling Air Pollutant Emission Factors
APEN -	Air Pollution Emission Notice (State of Colorado)
APCD -	Air Pollution Control Division (State of Colorado)
ASTM -	American Society for Testing and Materials
BACT -	Best Available Control Technology
BTU -	British Thermal Unit
CAA -	Clean Air Act (CAAA = Clean Air Act Amendments)
CCR -	Colorado Code of Regulations
CEM -	Continuous Emissions Monitor
CF -	Cubic Feet (SCF = Standard Cubic Feet)
CFR -	Code of Federal Regulations
CO -	Carbon Monoxide
COM -	Continuous Opacity Monitor
CRS -	Colorado Revised Statute
EF -	Emission Factor
EPA -	Environmental Protection Agency
FI -	Fuel Input Rate in MMBtu/hr
FR -	Federal Register
G -	Grams
Gal -	Gallon
GPM -	Gallons per Minute
HAPs -	Hazardous Air Pollutants
HP -	Horsepower
HP-HR -	Horsepower Hour (G/HP-HR = Grams per Horsepower Hour)
LAER -	Lowest Achievable Emission Rate
LBS -	Pounds
M -	Thousand
MM -	Million
MMscf -	Million Standard Cubic Feet
MMscfd -	Million Standard Cubic Feet per Day
N/A or NA -	Not Applicable
NO_X -	Nitrogen Oxides
NESHAP -	National Emission Standards for Hazardous Air Pollutants
NSPS -	New Source Performance Standards
P -	Process Weight Rate in Tons/Hr
PE -	Particulate Emissions
PM -	Particulate Matter

PM_{10} -	Particulate Matter Under 10 Microns
PSD -	Prevention of Significant Deterioration
PTE -	Potential To Emit
RACT -	Reasonably Available Control Technology
SCC -	Source Classification Code
SCF -	Standard Cubic Feet
SIC -	Standard Industrial Classification
SO_2 -	Sulfur Dioxide
TPY -	Tons Per Year
TSP -	Total Suspended Particulate
VOC -	Volatile Organic Compounds

APPENDIX F

Permit Modifications

DATE OF REVISION	TYPE OF MODIFICATION	SECTION NUMBER, CONDITION NUMBER	DESCRIPTION OF REVISION
March 19, 2010	Significant Modification	Section I	Revised the description in Condition 1.1 to address the new rail car unloader, associated conveyor, lowering well and crushers. Added the new rail car unloader, associated conveyor, lowering well and crushers to the table in Condition 6.1. Removed the 3rd column in the table in Condition 6.1 and renamed the 1st column "Emission Unit No./Facility ID".
		Section II.1	Revised the last paragraph in Condition 1.1.2 to better describe the calculated average opacity value. In addition, added language to Condition 1.1.2 to note that the baseline opacity from the initial test has been set and to require the source to submit the proposed baseline opacity from any subsequent tests. Added Condition 1.1.3 to indicate that the CAM requirements shall be used to monitor compliance with the PM limits. Included the PM emissions factors from the latest stack test in Condition 1.2. Added the baseline opacity levels in Condition 1.18.1.2 (CAM requirements).
		Section II.3	Added provisions for the new railcar unloader, associated conveyor and lowering well. Reformatted the Reg 1 fugitive particulate matter requirements (Condition 3.2), as part of this "old" Conditions 3.5 and 3.6 are in Condition 3.2.2. Added the following statement to "old" Condition 3.2.1 ("new" Condition 3.2.3): "[t]he 20% opacity, no off-property transport, and nuisance emission limitations are guidelines and not enforceable standards and no person shall be cited for violation thereof pursuant to C.R.S. 25-7-115." Revised "old" Condition 3.5.1 ("new" Condition 3.2.2.1.a) to indicate that the dust collection method is enclosures.
		Section II.4	Added provisions for the new crushers. Updated the version date and emission factor source for the transfer point and crusher emission factors in Condition 4.2.
		Section II.12	Removed the "note" in Condition 12.4.5. Added alternative opacity monitoring requirements to Condition 12.4.6. These are the same requirements that were included in the original T5 permit issued 5/1/01.
		Section II.16	Added provisions for burning natural gas as fuel. Combined opacity requirements (Conditions 16.6 and 16.7) into one Condition (16.6) and added some additional language regarding monitoring requirements. Condition 16.8 was renumbered as Condition 16.8.
		Section IV	Removed the NSPS Subpart Y provisions from the table in Section 1 (non-applicable requirements).
		Section V	Added a version date. The title for Condition 6 was changed from "Emission Standards for Asbestos" to "Emission Controls for Asbestos" and in the text the phrase "emission standards for asbestos" was changed to "asbestos control".
		Appendix A	Added gravel pit activities for onsite gravel use to the insignificant activities list.

DATE OF REVISION	TYPE OF MODIFICATION	SECTION NUMBER, CONDITION NUMBER	DESCRIPTION OF REVISION
March 19, 2010	Significant Modification	Appendices B and C	Added the new rail car unloader, associated conveyor, lowering well and crushers to the tables.
		Appendix G	Added the 24-hour opacity indicator levels. In addition, the language specifying that startups, shutdowns and malfunctions did not have to be included in the 24-hour average opacities was removed from Section III.c. Section III.c was also revised to include further justification of the 15% opacity indicator and to discuss why past performance test data was not used to set the 24-hour opacity indicator.
May 14, 2010	Administrative Amendment	Section II.16	Revised Condition 16.4 to include natural gas as a permitted fuel. Removed the requirement in Condition 16.5 to determine the heat content of the fuel oil since the heat content is not used in emission calculations.
		Section V	Labeled the 3rd paragraph of General Condition 29.a as 29.b and added the provisions in Reg 7, Section III.C as paragraph e. Revised the version date.
August 11, 2010	Administrative Amendment	Appendix G	Section III.c was revised to clarify the justification of the 24-hr opacity indicator and to remove language indicating the 24-hr opacity indicator was presumptively acceptable.
November 4, 2010	Administrative Amendment	Appendix G	Removed the sentence indicating that startups, shutdowns and malfunctions can be excluded from the 24-hr average opacity from Section II (Table, Section III.f – averaging time for indicator 1 (visible emissions)) of the CAM plan.
December 4, 2012	Minor Modification	Page Following Cover Page	Changed the responsible official and permit contact. Changed the address under "issued to" and included the full company name (i.e., "Public Service Company of Colorado", rather than "Public Service Company")
		Headers and Footers	Included the full company name (i.e., "Public Service Company of Colorado", rather than "Public Service Company")
		Section I	Condition 1.4 was revised to add Section II, Condition 1.19 as a state-only requirement and to remove Section II, Condition 1.12 and Section V, Condition 3.d as state-only requirements
		Section II.1	Added a "new" Condition 1.1.3 to address compliance with the PM limit in Condition 1.1 when the Regional Haze PM limits take effect. Condition 1.12 was revised to remove the state-only lead requirement. Condition 1.18.1 was revised to address the performance testing requirements for the Regional Haze PM limits. The requirements in Regulation No. 6, Part B, Section VIII for low emitters were included in Condition 1.19 (these are state-only requirements). Added the Regional Haze Requirements (Regulation No. 3, part F) in Condition 1.20.
		Section II.12	The phrase "may elect to" in the first paragraph of Condition 12.4.6 (monitoring requirements when the COMS is down) was replaced with "shall".
		Section II.14	Removed Condition 14.1 (Reg 8 lead standard).
		Section II.16	Replaced the requirement in Condition 16.7 to submit a case-by-case MACT application with a requirement for the source to submit an application to incorporate the requirements in 40 CFR Part 63 Subpart DDDDD within one year of the compliance date.

DATE OF REVISION	TYPE OF MODIFICATION	SECTION NUMBER, CONDITION NUMBER	DESCRIPTION OF REVISION
December 4, 2012	Minor Modification	Section III	Revised the designated representative and the alternate designated representative.
		Section IV	The requirement to submit semi-annual reports for any excursions under CAM and the requirement to submit performance test results within 60 days in Reg 3, Part F, Section VII.E (Regional Haze Reporting Requirements) were included in the permit shield for streamlined conditions (Table in Section 3).
		Section V	Changed the version date. The paragraph in Condition 3.d indicating that the requirements are state-only was removed, since EPA approved these provisions into Colorado's SIP effective October 6, 2008.
		Appendices	Added a fluorescent lamp crusher to the insignificant activity list in Appendix A. Included the full company name (i.e., "Public Service Company of Colorado", rather than "Public Service Company") in the reports in Appendices B and C. Changed the name of the Division contact for reports in Appendix D. Added language to the CAM plan (under "rational for selection of indicator ranges") in Appendix G to lower the maximum opacity add-on to 3.5% when the Regional Haze PM limits take effect. In addition, the table in the CAM Plan (Section II of Appendix G) was revised to address the performance test requirements for the Regional Haze PM limits.

APPENDIX G

Compliance Assurance Monitoring Plan

I. Background

a. Emission Unit Description:

Boiler No. 1 (Unit 1), Riley-Stoker, Model No. 2489, Serial No. 3447, Front-Fired Boiler, Rated at 1,963 MMBtu/hr. Coal-Fired with Natural Gas and/or No. 2 Fuel Oil Used for Startup, Shutdown and/or Flame Stabilization.

Boiler No. 2 (Unit 2), Combustion Engineering, Model and Serial No. 1337, Tangentially-Fired Boiler, Rated at 2,712 MMBtu/hr. Coal-Fired with No. 2 Fuel Oil Used for Startup, Shutdown and/or Flame Stabilization.

b. Applicable Regulation, Emission Limit, Monitoring Requirements:

Regulations:	Operating Permit Condition 1.1 (underlying condition from Long-Term Strategy Review and Revision of Colorado's State Implementation Plan for Class I Visibility Protection Part I: Hayden Station Requirements (8/15/96), as approved by EPA at 62 FR 2305 (1/16/97), Section VI.C.V.8.c.ii.(2))
Emission Limitations: **(for each boiler)**	PM 0.03 lb/MMBtu, averaged over three (3) two hour test runs
Monitoring Requirements:	Visible Emissions (Opacity) and Preventative Maintenance

c. Control Technology:

Both boilers are equipped with a fabric filter dust collector (FFDC) to control particulate matter emissions generation from the combustion of coal. The FFDCs have a particulate removal efficiency greater than 99%.

II. Monitoring Approach

	Indicator 1	Indicator 2
I. Indicator	Visible Emissions (Opacity)	Preventative Maintenance
Measurement Approach	Opacity emissions will monitored by a Continuous Opacity Monitor (COM).	Internal inspections of the baghouses will be conducted semi-annually. Each baghouse is inspected visually for deterioration and areas of corrosion or erosion. The bags are inspected for holes and tears, and are repaired and replaced as necessary. Door seals are inspected for tightness.
II. Indicator Range	An excursion is defined as an opacity value greater than 15% for more than 60 seconds. When this occurs, the last compartment to be cleaned in automatic cycle is investigated. An excursion is also defined as any 24-hour period in which the average opacity exceeds the baseline level established by the performance test required by Condition 1.1.2 and/or 1.20.3.2. The baseline opacities set by the June 2009 performance tests required by Condition 1.1.2 are as follows: Unit 1 – 7.2% and Unit 2 – 6.2%. These values serve as the baseline opacity until the next required performance test as specified in Condition 1.1.2 and/or 1.20.3.2. In addition to the above, when an excursion occurs, the appropriate corrective action is made and repairs and/or replacements are made as necessary. A history of the correction action(s) will be maintained at the facility and made available upon request.	An excursion is defined as failure to perform the semi-annual inspection within 60 days of its scheduled completion date. An excursion triggers an immediate inspection.
III. Performance Criteria		
a. Data Representativeness	An increase in visible emissions (opacity) under steady-state operating conditions is an indirect indication of a potential increase in particulate matter emissions.	Internal inspections can be used to identify torn bags and/or bags with diminished integrity. Torn bags and/or bags with diminished integrity can be an indication of baghouse issues and potentially an increase in particulate matter emissions.

	Indicator 1	Indicator 2
b. Verification of Operational Status	Operational status shall be demonstrated through the continuous process on/off signal recorded by the Data Acquisition and Handling System (DAHS).	Documentation in plant records will serve as the verification that the semi-annual inspection has been performed.
c. QA/QC Practices and Criteria	The COM equipment and data quality assurance is in conformation with the applicable requirements in 40 CFR Part 60 and the internal CEM Quality Control/Quality Assurance program developed in accordance with 40 CFR Part 75.	Trained personnel perform inspections and maintenance using an established procedures and checklist. Such procedures and checklists shall be made available to the Division upon request.
d. Monitoring Frequency	Continuous	Semi-Annual
e. Data Collection Procedures	Opacity measurements will be performed in accordance with the requirements in 40 CFR Part 60 Subpart A § 60.13. The emissions data will be stored in the unit's DAHS.	Results of inspections and maintenance activities are recorded by the plant and made available upon request.
f. Averaging Time	COM data shall be reduced to 6-minute averages as required by 40 CFR Part 60 Subpart A § 60.13. All 6-minute averages in each 24-hour period (7 am to 7 am) will be averaged together to get a 24-hour average.	N/A

III. Justification

a. Background:

The pollutant specific emission units are two (2) coal fired boilers. Each boiler is equipped with a FFDC to control particulate matter emissions.

Particulate matter removal is accomplished by passing the flue gases through a porous fabric material. The solid particles buildup on the fabric surface to form a thin porous layer of solids. This layer works in conjunction with the fabric material to trap the particulate matter. According to the CAM plan submitted by the source, the baghouse manufacturer guarantees a particulate removal efficiency greater than 99%, with the total concentration at standard conditions guaranteed at 0.007 gr/dscf and a particulate emission rate of 0.0139 lb/MMBtu. The results of the performance test conducted in 1999 demonstrated that the removal of particulate matter emissions exceeded manufacturer's guarantees, as indicated below:

	Particulate Matter Emissions	
Emission Unit	lb/MMBtu	Gr/dscf
Unit 1	0.0122	0.0056
Unit 2	0.0109	0.0062

b. Rationale for Selection of Performance Indicators

Monitoring of the baghouse operational parameters is intended to keep the baghouse operating within the manufacturer's specifications. Based on the manufacturer's guarantees and actual performance test data on these units, it can be concluded that when the baghouse emissions controls are operated as designed, particulate emissions are controlled to levels well below the applicable particulate emission standard. As such, the requirements of compliance assurance monitoring for particulate matter emissions from these units can be accomplished through the monitoring of the selected performance indicators. Monitoring these indicators will signal the potential need for corrective actions to avoid potential problems with any of these factors.

Potential issues in the operation of a baghouse that can compromise its ability to effectively control particulate emissions can generally be categorized as issues with torn and/or broken bags or seals, and characteristics of the ash cake on the bags. The indicators described below were selected for their ability to provide an indication or warning of potential problems with any of these factors.

Visible Emissions (Opacity)

Based on the relationship between particulate matter in a flue gas stream and opacity, an increase in opacity is a valid indication of increased particulate emissions due to compromised baghouse performance. Increased opacity emissions from typical levels, such as a sudden spike or a gradual increase are an indication that baghouse performance has decreased.

Preventative Maintenance

Preventative maintenance is performed on the baghouses to ensure that they are operated and maintained in accordance with the manufacturer's guidelines.

c. Rationale for Selection of indicator Ranges

Visible emissions (opacity)

The source proposed that a spike in opacity, defined as an opacity reading greater than 15% for sixty (60) seconds or more is an indication of potential reduction in baghouse performance. In response to this indicator, the last compartment to be cleaned in automatic cycle is investigated.

The Division agrees that a sudden spike in opacity is a reasonable indicator that the baghouse operation may have been compromised. The 15% indicator level is below the opacity limitations set for both units. Although PSCo has not correlated 15% to a level of PM emissions, this is a short term (one minute or more) indicator of baghouse performance and as specified in 40 CFR Part 64 § 64.4(c)(1), emission testing is not required to be conducted over the indicator range or range of potential emissions. Given that the PM standard is based on the average of three one (1) hour tests and past performance tests indicate that the PM emissions are less than 50% of the standard, the short term 15% opacity indicator

serves to provide an indication of proper baghouse operation and as such can be reasonable indicator that the units are in compliance with the PM limitations.

Although the source proposed an indicator range of "an increase in opacity above baseline conditions during normal operations to opacity emissions greater than 10% over an extended period of time", the Division considered such a range to be inappropriate, since neither the time period (i.e., averaging time) was defined and it was not clear how the 10% opacity related to the PM emission limitations. Specifically PSCo did not correlate the 10% opacity to a PM emission level, nor did they submit any performance test data with their CAM plan.

Therefore, the Division is including as CAM a 24-hr average opacity indicator, which is similar to the monitoring required for control devices (e.g. baghouses) used to meet the particulate matter standards under NSPS Da. For new (constructed after February 28, 2005) electric utility steam generating units NSPS Subpart Da specifies that a baseline opacity level be established and that any 24-hr average opacity value that exceeds the baseline level shall be cause for investigating the control device.

The 24-hr average opacity indicator range will be set in a manner similar to the methodology specified in 40 CFR Part 60 Subpart Da § 60.48Da(o)(2)(iii), which states that the baseline opacity is established during the performance test by averaging all 6-minute average opacity values from the COMS recorded during each of the test runs and then adding a 2.5% opacity to the calculated average opacity. If the NSPS Da baseline opacity (average during test run plus 2.5%) is less than 5%, then the baseline opacity is set at 5%. Since Unit 1 is subject to less stringent particulate matter standards than the NSPS Da standards for new units (0.1 lb/MMBtu vs. 0.015 lb/MMBtu), the Division is allowing an opacity value up to 5% to be added to the calculated opacity average from the performance test. The actual allowable opacity add-on is based on the results of the performance test. Also, as provided for in NSPS Da, if the baseline opacity (COMS average plus add-on) is less than 5%, then the baseline opacity (i.e., the indicator range) is set at 5%. Note that when the Regional Haze limit takes effect the maximum opacity add-on shall be set at 3.5% rather than 5% in order to be consistent with the other PSCo facilities when they become subject to .lower Regional Haze PM limits.

Since the 24-hr opacity indicator is very similar to the control device monitoring required for new units under NSPS Da, the Division considers that the 24-hr opacity indicator is acceptable for CAM.

The Division intends to require that a performance test be conducted within 180 days of renewal permit issuance to demonstrate compliance with the PM emission limitation, therefore, the permit will require that the source set the baseline opacity during this test. Although performance tests were conducted on these units in 1999 and information on opacity emissions during these tests may be available (PSCo is only required to retain monitoring data for five years after it is generated) and thus may be used to set the indicator range(s), the Division considers that it is more appropriate to set the indicator range(s) on more recent tests. As indicated in 40 CFR Part 64 § 64.4(e)(2), if installation of equipment and/or performance testing to set indicator ranges is necessary prior to performing the monitoring under CAM, then the schedule for completing installation and/or testing and beginning operation of the monitoring shall be as expeditiously as practicable but no longer than 180 days after approval of the permit. To that end, the permittee conducted performance tests in June of 2009 and began monitoring the 24-hour

opacity averages consistent with the baseline values set in those tests. Since the renewal permit was issued in April 2009, the indicator ranges were set and monitoring commenced within 180 days of renewal permit issuance, as required by § 64.4(e)(2).

Preventative Maintenance

Failure to conduct scheduled semi-annual inspections and maintenance per the facility's internal preventative maintenance program may compromise the ability of the FFDC to function as designed. As such, inspections are performed as required in order to ensure proper baghouse function and perform required repairs and maintenance of the bags as needed.