

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150



CONSTRUCTION PERMIT

PERMIT NUMBER: **10EP325**

ISSUANCE 6

DATE ISSUED: 12/27/2016

ISSUED TO: Colorado Springs Utilities

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

R.D. Nixon Power plant facility, known as Ray D. Nixon Power Plant, located at 6598 Ray Nixon Road, Fountain, El Paso County Colorado.

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

Facility Equipment ID	AIRS Point	Description
B001	001	One (1) Babcock and Wilcox, Pulverized Coal Wall Fired Dry Bottom boiler, firing coal or coal/woody biomass blend, Unit Number 1, model: N/A, SN: A-001, rated at 2,049 MMBtu per hour. The coal burner igniters are permitted to fire Number 2 fuel oil and Natural Gas (NG) fuels. The boiler is equipped with a Western Precipitation Thermoflex baghouse, model: N/A, SN:, N/A, for Particulate Matter (PM) emissions control, a Lime Spray Dryer Absorber (LSD), model: ACP 12500, SN:, 432-0042, for Sulfur Dioxide (SO ₂) emissions control, Activated Carbon Injection (ACI), model: N/A, SN:, N/A, for Hg emissions control, and Ultra Low NO _x Burners and Over Fire Air (being installed in Fall 2016) for Nitrogen Oxide (NO _x) emissions control.

THIS PERMIT IS GRANTED SUBJECT TO ALL RULES AND REGULATIONS OF THE COLORADO AIR QUALITY CONTROL COMMISSION AND THE COLORADO AIR POLLUTION PREVENTION AND CONTROL ACT C.R.S. (25-7-101 *et seq*), TO THOSE GENERAL TERMS AND CONDITIONS INCLUDED IN THIS DOCUMENT AND THE FOLLOWING SPECIFIC TERMS AND CONDITIONS:

REQUIREMENTS TO SELF-CERTIFY FOR FINAL APPROVAL

Issuance #5 – Lime Spray Dryer Absorber (LSD) and Activated Carbon Injection (ACI) Control Devices Requirements

1. Within one hundred and eighty days (180) after commencement of operation, and completion of the testing period of the Lime Spray Dryer Absorber (LSD) and the Activated Carbon Injection (ACI) control devices, compliance with the conditions contained on this permit shall be demonstrated to the Division. It is the permittee's responsibility to self certify compliance with the conditions. Failure to demonstrate compliance within 180 days may result in revocation of the permit or enforcement action by the Division. Information on how to certify compliance was mailed with the permit or can be obtained from the Division. (Reference: Regulation Number 3, Part B, III.G.2).
2. Within one hundred and eighty days (180) after commencement of operation, and completion of the testing period of the Lime Spray Dryer Absorber (LSD) and the Activated Carbon Injection

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

(ACI) control devices, the operator shall complete all initial compliance testing and sampling as required in this permit and submit the results to the Division as part of the self-certification process. (Reference: Regulation Number 3, Part B, Section III.E.)

3. The owner or operator shall develop an operating and maintenance (O&M) plan, along with a recordkeeping format, that outlines how the applicant will maintain compliance on an ongoing basis with the requirements of this permit. Compliance with the O&M plan shall commence at startup of the Lime Spray Dryer Absorber (LSD) and Activated Carbon Injection (ACI) control devices. Within one hundred and eighty days (180) after commencement of operation, and completion of the testing period of the LSD and the ACI control devices, the owner or operator shall submit the O&M plan to the Division. Failure to submit an acceptable operating and maintenance plan could result in revocation of the permit. (Reference: Regulation Number 3, Part B, III.E.)
4. The model number of the subject equipment and the associated control equipment shall be provided to the Division within one hundred and eighty days (180) after issuance of this permit. (Reference: Regulation Number 3, Part B, III.E.)

Issuance #6 – Data Requirements Rule Requirements

5. Within one hundred and eighty days (180) after permit issuance, compliance with the conditions contained on this permit shall be demonstrated to the Division. It is the permittee's responsibility to self certify compliance with the conditions. Failure to demonstrate compliance within 180 days may result in revocation of the permit or enforcement action by the Division. Information on how to certify compliance was mailed with the permit or can be obtained from the Division's website at <https://www.colorado.gov/pacific/cdphe/air-permit-self-certification>. (Reference: Regulation Number 3, Part B, III.G.2).
6. Within one hundred and eighty days (180) after permit issuance, the operator shall complete all initial compliance testing and sampling as required in this permit and submit the results to the Division as part of the self-certification process. (Reference: Regulation Number 3, Part B, III.E.)

EMISSION LIMITATIONS AND RECORDS

7. Emissions of air pollutants shall not exceed the following limitations (as calculated using the emission factors included in the Notes to Permit Holder section of this permit). Monthly records of the actual emission rates shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation Number 3, Part B, Section II.A.4)

Annual Limits:

Facility Equipment ID	AIRS Point	Tons per Year							Emission Type
		PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x *	VOC	CO	
B001	001	--	--	--	--	2,853.3	--	--	Point

Note: * The annual NO_x emission limit was previously accepted by the source for PSD netting calculation purposes and considerations to avoid NO_x PSD permitting at the Front Range Power Plant.

- a. Compliance with the annual NO_x emission limit shall be determined using data from the continuous emission monitoring system as required by Condition 18.
- b. Compliance with the annual NO_x emission limit shall be determined on a rolling twelve (12) month total. By the end of each month a new twelve month total is calculated based on the previous twelve months' data. The permit holder shall calculate actual emissions each month

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

and keep a compliance record on site or at a local field office with site responsibility for Division review.

8. Facility-wide emissions of air pollutants from all emission units at Clear Spring Ranch, including insignificant activities emissions and emissions from all permitted and grandfathered points from the Colorado Springs Utilities – Ray Nixon Power Plant (AIRS ID: 041-0030), Colorado Springs Utilities – Front Range Power Plant (AIRS ID: 041-0030), and Colorado Springs Utilities – Solids Handling and Disposal Facility (SHDF) (AIRS ID: 041-0091) shall not exceed the following limitations. Monthly and Annual records of the actual emissions shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Colorado Regulation No. 3, Part B, Section II.A.4).

Annual Limits:

Emissions per Averaging Year (Rolling 12 Month Total) (ton per year)						
TSP	PM₁₀	PM_{2.5}	SO₂	NO_x	VOC	CO
--	--	--	1,995.0	--	--	--

Monthly Limits:

Averaging Period	Emissions per Month (tons per calendar month)						
	PM	PM₁₀	PM_{2.5}	SO₂	NO_x	VOC	CO
January	--	--	--	420	--	--	--
February	--	--	--	420	--	--	--
March	--	--	--	420	--	--	--
April	--	--	--	420	--	--	--
May	--	--	--	420	--	--	--
June	--	--	--	420	--	--	--
July	--	--	--	420	--	--	--
August	--	--	--	420	--	--	--
September	--	--	--	420	--	--	--
October	--	--	--	420	--	--	--
November	--	--	--	420	--	--	--
December	--	--	--	420	--	--	--

During the first twelve (12) months of operation beginning on January 1, 2017, compliance with both the monthly and annual emission limitations shall be required. After the first twelve (12) months of operation, compliance with only the annual limitation shall be required.

Compliance with the monthly and annual emissions of SO₂ for B001 shall be monitored using the CEMS as required by Condition 18. The owner or operator shall comply with the 40 CFR Part 75 monitoring and recordkeeping requirements with the exception of the CEMS bias adjustment requirements. Compliance with the monthly and annual emissions of SO₂ from all other emission sources at Colorado Springs Utilities – Ray Nixon Power Plant shall be monitored and recorded as specified in the Title V Operating Permit 95OPEP106.

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

Compliance with the monthly and annual emissions of SO₂ from emission units located at Colorado Springs Utilities - Front Range Power Plant (AIRS ID: 041-0030) shall be monitored and recorded as specified in the Title V Operating Permit 95OPEP106.

Compliance with the monthly and annual emissions of SO₂ from emission units located at Colorado Springs Utilities – Solids Handling and Disposal Facility (AIRS ID: 041-0091) shall be monitored and recorded as specified in the Title V Operating Permit 95OPEP152. All equipment at the SHDF currently covered by the existing Title V permit must comply with all monitoring, reporting, and recordkeeping requirements in the Title V Operating Permit 95OPEP152.

Compliance with the monthly and annual emissions of SO₂ from Clear Springs Ranch, which includes SO₂ emissions from Colorado Springs Utilities – Ray Nixon Power Plant (AIRS ID: 041-0030), Colorado Springs Utilities – Front Range Power Plant (AIRS ID: 041-0030), and Colorado Springs Utilities – Solids Handling and Disposal Facility (AIRS ID: 041-0091) shall be determined by recording the facility’s annual emissions for SO₂ on a rolling twelve (12) month total that will begin on January 13, 2017. By the end of each month a new twelve-month total shall be calculated based on the previous twelve month’s data. The permit holder shall calculate actual emissions each month and keep a compliance record on site or at a local field office with site responsibility for Division review.

Please note that the rolling twelve month total emission calculation must begin on January 1, 2017; however, the calculation shall not include emissions data prior to January 1, 2017.

9. The following control equipment shall be maintained and operated to ensure satisfactory performance. The owner or operator shall monitor compliance with this condition through the approved compliance tests, compliance with the Operating and Maintenance Plan, compliance records, and the operating and maintenance requirements as specified in the Title V Operating Permit 95OPEP106, and other methods as approved by the Division (Colorado Regulation No. 3, Part B, Section III.E).

Facility Equipment ID	AIRS Point	Unit/Stack	Control Device	Pollutants Controlled
B001	001	Equipment stack	Baghouse	PM, PM ₁₀ , PM _{2.5}
			Lime Spray Dryer Absorber (LSD)	SO ₂
			Activated Carbon Injection (ACI)	Hg
			Ultra Low NO _x Burners and Over Fire Air ¹	NO _x

Notes: ¹ The Ultra Low NO_x burners are being installed in Fall 2016.

PROCESS LIMITATIONS AND RECORDS

10. This source shall be limited to the following operational rates as listed below. Adequate records of the actual operations shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation 3, Part B, II.A.4).
- a. The ignitor fuel use heat contribution shall not exceed 5% of the total annual heat input from all fuels as specified by the Title V Operating Permit 95OPEP106. The terms and conditions of this permit are based on the boiler burning bituminous or sub-bituminous coal as the primary fuel. Natural gas and Number 2 distillate or a mixture of the distillate and Natural Gas may be used as secondary fuels for firing the boiler burner ignitors and shall not be used as the only fuel for the production of electricity. The use of any other fuel in the boiler or ignitors may require the permit to be re-opened prior to any use of the fuel.

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

- b. Compliance with the 5% igniter fuel heat input annual limit shall be determined on a rolling (12) month total. By the end of each month a new twelve month total shall be calculated based on the previous twelve months' data as specified by the Title V Operating Permit 95OPEP106. The source shall calculate monthly heat inputs and maintain a compliance record for Division review upon request.
- c. The heat content shall be calculated from the emissions recorded by the carbon dioxide continuous emissions monitor (CEM) as specified by the Title V Operating Permit 95OPEP106, or measured by testing as described in the fuel sampling plan required by the Title V Operating Permit 95OPEP106.

STATE AND FEDERAL REGULATORY REQUIREMENTS

- 11. Visible emissions shall not exceed twenty percent (20%) opacity during normal operation of the source. During periods of startup, process modification, or adjustment of control equipment visible emissions shall not exceed 30% opacity for more than six minutes in any sixty consecutive minutes. (Reference: Regulation Number 1, Section II.A.1.)
 - a. Compliance with the Opacity limits shall be demonstrated using Continuous Opacity Monitoring System (COMS) results. The requirements for the COMs are defined in the Title V Operating Permit 95OPEP106.
- 12. 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 (unless otherwise specified in this permit) for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes. (Reference: Colorado Regulation Number 1, II.A.4)
 - a. Compliance with the Opacity limits shall be demonstrated using Continuous Opacity Monitoring System (COMS) results. The requirements for the COMs are defined in the Title V Operating Permit 95OPEP106.
- 13. This facility is subject to requirements of Colorado Regulation No. 3, Part F, Regional Haze Limits - Best Available Retrofit Technology (BART) and Reasonable Progress (RP). This facility shall not emit or cause to be emitted nitrogen oxides (NO_x), sulfur dioxide (SO₂), or particulate in excess of the following limits:

Unit	Emission Limit (lbs per MMBtu)		
	NO _x	SO ₂	Particulate
Nixon	0.21 (30-day rolling average)	0.11 (30-day rolling average)	0.03

- a. Compliance with the Sulfur Dioxide (SO₂), Nitrogen Oxide (NO_x), and Particulate emissions limits shall be demonstrated as defined in the Title V Operating Permit 95OPEP106.
- 14. This source is subject to the National Emissions Standards for Hazardous Air Pollutants requirements of Regulation No. 8, Part E, Subpart UUUUU (40 CFR Part 63, Subpart UUUUU), for Coal- and Oil-Fired Electric Utility Steam Generating Units including, but not limited to, the following:

The requirements below reflect the rule language of 40 CFR Part 63, Subpart UUUUU published in the Federal Register on April 6, 2016. However, if revisions to this subpart are published at a later

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

date, the owner or operator is subject to the requirements contained in the revised version of 40 CFR Part 63, Subpart UUUUU.

What This Subpart Covers

- a. §63.9982 What is the affected source of this subpart?
 - i. §63.9982(a) – This subpart applies to each individual or group of two or more new, reconstructed, or existing affected sources(s).
 - ii. §63.9982(d) – An EGU is existing if it is not new or reconstructed. An existing electric steam generating unit that meets the applicability requirements after the effective date of this final rule due to a change in process is considered to be an existing source under this subpart.

The EGUs at this source commenced construction prior to May 3, 2011 and are considered existing EGUs under Subpart UUUUU.

- b. §63.9984 When do I have to comply with this subpart?
 - i. §63.9984(c) – You must meet the notification requirements in §63.10030 according to the schedule in §63.10030 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart.

Emission Limitations and Work Practice Standards

- c. §63.9990 What are the subcategories of EGUs?
 - i. §63.9990(a) Coal-fired EGUs are subcategorized as defined in paragraph (a)(1) and as defined in §63.10042.
 - a. §63.9990(a)(1) – EGUs designed for coal with a heating value greater than or equal to 8,300 Btu/lb/

Coal-fired electric utility steam generating unit means an electric utility steam generating unit meeting the definition of “fossil fuel-fired” that burns coal for more than 10.0 percent of the average annual heat input during the 3 previous calendar years after the compliance date for your facility in §63.9984 or for more than 15.0 percent of the annual heat input during any one of those calendar years. EGU owners and operators must estimate coal, oil, and natural gas usage for the first 3 calendar years after the applicable compliance date and they are solely responsible for assuring compliance with this final rule or other applicable standard based on their fuel usage projections. After the first 3 years of compliance, EGUs are required to evaluate applicability based on coal or oil usage from the three previous calendar years on an annual rolling basis (§63.10042).

- d. §63.9991 – What emission limitations, work practice standards, and operating limits must I meet?
 - i. §63.9991(a)(1) - You must meet each emission limit and work practice standard in Table 2 and 3 to this subpart that applies to your EGU, for each EGU at your source except as provided in §63.1009.
 - a. As stated in §63.9991, you must comply with the following applicable emission limits¹: If your EGU is a coal-fired unit not low rank virgin coal, you must meet the following emission limits and work practice standards using the requirements, as appropriate and limitations with the test methods in Table 5 to this subpart (Table 2 to Subpart UUUUU, Item 1):

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

Table 2 to Subpart UUUUU of Part 63 – Emission Limits for Existing EGUs				
Item No.	For the following Pollutants...	You must meet the following emission limits and work practice standards...	Using these requirements, as appropriate and limitations with the test methods in Table 5 to this subpart UUUUU...	
1.a	Filterable Particulate Matter (PM)	3.0E-2 lb/MMBtu or 3.0E-1 lb/MWh ²	Collect a minimum of 1 dscm per run.	
	OR			
	Total non-Hg HAP Metals	5.0E-5 lb/MMBtu or 5.0E-1 lb/GWh	Collect a minimum of 1 dscm per run.	
	OR			
	Individual HAP Metals	Antimony (Sb)	8.0E-1 lb/TBtu or 8.0E-3 lb/GWh	Collect a minimum of 3 dscm per run.
		Arsenic (As)	1.1E0 lb/TBtu or 2.0E-2 lb/GWh	
		Beryllium (Be)	2.0E-1 lb/TBtu or 2.0E-3 lb/GWh	
		Cadmium (Cd)	3.0E-1 lb/TBtu or 3.0E-3 lb/GWh	
		Chromium (Cr)	2.8E0 lb/TBtu or 3.0E-2 lb/GWh	
		Cobalt (Co)	8.0E-1 lb/TBtu or 8.0E-3lb/GWh	
	Lead (Pb)	1.2E0 lb/TBtu or 2.0E-2 lb/GWh		
	Manganese (Mn)	4.0E0 lb/TBtu or 5.0E-2lb/GWh		
	Nickel (Ni)	3.5E0 lb/TBtu or 4.0E-2 lb/GWh		
	Selenium (Se)	5.0E0 lb/TBtu or 6.0E-2 lb/GWh		
1.b.	Hydrogen chloride (HCl)	2.0E-3 lb/MMBtu or 2.0E-2lb/MWh	For Method 26A at Appendix A-8 to Part 60 of this chapter, collect a minimum of 0.75 dscm per run; For Method 26, collect a minimum of 120 liters per run. For ASTM D6348-03 ³ or Method 320 at Appendix A to Part 63 of this chapter, sample for a minimum of 1 hour.	
	OR			
	Sulfur dioxide (SO ₂) ⁴	2.0E-1 lb/MMBtu or 1.5E0 lb/MWh	SO ₂ CEMS.	
1.c	Mercury (Hg)	1.2E0 lb/TBtu or 1.3E-2 lb/GWh	LEE Testing for 30 days with a sampling period consistent with that given in Section 5.2.1 of Appendix A to this subpart per Method 30B at Appendix A-8 to Part 60 of this chapter run or Hg CEMS or sorbent trap monitoring system only.	
		OR		
		1.0E0 lb/TBtu or 1.1E-2 lb/GW	LEE Testing for 90 days with a sampling period consistent with that given in Section 5.2.1 of Appendix A to this subpart per Method 30B run or Hg CEMS or sorbent trap monitoring system only.	

Notes: ¹ For LEE emissions testing for total PM, total HAP metals, individual HAP metals, HCl, and HF, the required minimum sampling volume must be increased nominally by a factor of two.
² Gross output.
³ Incorporated by Reference, See §63.14.
⁴ You may not use the alternate SO₂ limit if your EGU does not have some form of FGD system and SO₂ CEMS installed.

- b. If your EGU is an existing EGU you must meet the following:
1. Conduct a tune-up of the EGU burner and combustion controls at least each 36 calendar months, or each 48 calendar months if

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

- neural network combustion optimization software is employed, as specified in §63.10021(e) (Table 3 to Subpart UUUUU, Item 1).
- c. If your EGU is a coal-fired EGU during startup, you must meet the following (Table 3 to Subpart UUUUU, Item 3):
 1. You have the option of complying using either of the following work practice standards (Table 3 to Subpart UUUUU, Item 3.a):
 - a. If you choose to comply using paragraph (1) of the definition of “startup” in §63.10042, you must operate all CMS during startup. Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on site use). For startup of a unit, you must use clean fuels as defined in §63.10042 for ignition. Once you convert to firing coal, you must engage all of the applicable control technologies except dry scrubber and SCR. You must start your dry scrubber and SCR systems, if present, appropriately to comply with relevant standards applicable during normal operation. You must comply with all applicable emissions limits at all times except for periods that meet the applicable definitions of startup and shutdown in this subpart. You must keep records during startup periods. You must provide reports concerning activities and startup periods, as specified in §63.10011(g) and §63.10021(h) and (i) (Table 3 to Subpart UUUUU, Item 3.a.(1)).
 - b. If you choose to comply using paragraph (2) of the definition of “startup” in §63.10042, you must operate all CMS during startup. You must also collect appropriate data, and you must calculate the pollutant emission rate for each hour of startup (Table 3 to Subpart UUUUU, Item 3.a.(2)).

For startup of an EGU, you must use one or a combination of the clean fuels defined in §63.10042 to the maximum extent possible, taking into account considerations such as boiler or control device integrity, throughout the startup period. You must have sufficient clean fuel capacity to engage and operate your PM control device within one hour of adding coal to the unit. You must meet the startup period work practice requirements as identified in §63.10020(e) (Table 3 to Subpart UUUUU, Item 3.a.(2)).

Once you start firing coal, you must vent emissions to the main stack(s). You must comply with the applicable emission limits beginning with the hour after startup ends. You must engage and operate your particulate matter control(s) within 1 hour of first firing of coal (Table 3 to Subpart UUUUU, Item 3.a.(2)).

You must start all other applicable control devices as

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

expeditiously as possible, considering safety and manufacturer/supplier recommendations, but, in any case, when necessary to comply with other standards made applicable to the EGU by a permit limit or a rule other than this Subpart that require operation of the control devices (Table 3 to Subpart UUUUU, Item 3.a.(2)).

2. If you choose to use just one set of sorbent traps to demonstrate compliance with the applicable Hg emission limit, you must comply with the limit at all times; otherwise, you must comply with the applicable emission limit at all times except for startup and shutdown periods (Table 3 to Subpart UUUUU, Item 3.c).
 3. You must collect monitoring data during startup periods, as specified in §63.10020(a) and (e). You must keep records during startup periods, as provided in §§63.10032 and 63.10021(h). You must provide reports concerning activities and startup periods, as specified in §§63.10011(g), 63.10021(i), and 63.10031 (Table 3 to Subpart UUUUU, Item 3.d).
- d. If your EGU is a coal-fired EGU during shutdown, you must meet the following (Table 3 to Subpart UUUUU, Item 4):
1. You must operate all CMS during shutdown. You must also collect appropriate data, and you must calculate the pollutant emission rate for each hour of shutdown for those pollutants for which a CMS is used. While firing coal during shutdown, you must vent emissions to the main stack(s) and operate all applicable control devices and continue to operate those control devices after the cessation of coal being fed into the EGU and for as long as possible thereafter considering operational and safety concerns. In any case, you must operate your controls when necessary to comply with other standards made applicable to the EGU by a permit limit or a rule other than this Subpart and that require operation of the control devices (Table 3 to Subpart UUUUU, Item 4).

If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel must be one or a combination of the clean fuels defined in §63.10042 and must be used to the maximum extent possible, taking into account considerations such as not compromising boiler or control device integrity (Table 3 to Subpart UUUUU, Item 4).

You must comply with all applicable emission limits at all times except during startup periods and shutdown periods at which time you must meet this work practice. You must collect monitoring data during shutdown periods, as specified in §63.10020(a). You must keep records during shutdown periods, as provided in §§63.10032 and 63.10021(h). Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown. You must provide reports concerning activities and shutdown periods, as specified in §§63.10011(g), 63.10021(i), and 63.10031 (Table 3 to Subpart UUUUU, Item 4).

- ii. §63.9991(c) - You may use the alternate SO₂ limits in Table 2 to this subpart only if your EGU:

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

- a. §63.9991(c)(1) - Has a system using wet or dry flue gas desulfurization technology and an SO₂ continuous emissions monitoring system (CEMS) installed on the EGU; and
- b. §63.9991(c)(2) - At all times, you operate the wet or dry flue gas desulfurization technology and the SO₂ CEMS installed on the EGU consistent with §63.10000(b).

General Compliance Requirements

- a. This source is subject to the general compliance requirements as specified in §63.10000.

Testing and Initial Compliance Requirements

- a. This source is subject to the testing and initial compliance requirements as specified in §63.10005, §63.10006, §63.10007, §63.10008, §63.10009, §63.10010, and §63.10011.

Continuous Compliance Requirements

- a. This source is subject to the continuous compliance requirements as specified in §63.10020, §63.10021, §63.10022, §63.10023.

Notification, Reports, and Records

- a. This source is subject to the notification, reports, and records requirements as specified in §63.10030, §63.10031, §63.10032, §63.10033.

- 15. This source is subject to the applicable requirements in 40 CFR Part 63, Subpart A “General Provisions”, as adopted by reference in Colorado Regulation No. 8, Part E, Subpart A. These requirements include, but are not limited to the following:
 - a. §63.4 – Prohibited Activities and Circumvention
 - b. §63.5 – Preconstruction Review and Notification Requirements
 - c. §63.8 – Monitoring Requirements
 - d. §63.12 – State Authority and Delegation
- 16. **State-Only Requirement:** This facility is subject to the Colorado Regulation No. 6, Part B, Section VIII, Standards of Performance for Coal-Fired Electric Steam Generating Units, as follows:
 - a. The Hg Budget Units at this facility is currently considered a Low Emitter (LE), since actual emissions from the boiler are no more than 29.0 pounds per year of mercury. LE status for the boiler shall be determined by data collected through the required Hg monitoring pursuant to 40 CFR Part 63, Subpart UUUUU (Condition 14) (Colorado Regulation No. 6, Part B, Section VIII.B.10).
 - b. The owner or operator of the Hg Budget Unit at this facility shall comply with all applicable Hg monitoring and recordkeeping requirements of 40 CFR Part 63, Subpart UUUUU (Condition 14) (Colorado Regulation No. 6, Part B, Section VIII.E.2).
 - c. For the purposes of this Section VIII and in addition to reporting requirements for Hg emissions in 40 CFR Part 63, Subpart UUUUU, the owner or operator shall submit written quarterly reports to the Division within 30 days of the end of each calendar quarter that includes the information specified in Section VIII.E.3. The Hg emissions reporting specified in this Section VIII.E.3 shall be in units of the applicable standard. The quarterly reports required shall include (Colorado Regulation No. 6, Part B, Section VIII.E.3):

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

- i. For each Hg Budget Unit that is a Low Emitter, the lbs per year emitted for each calendar quarter and within 30 days of the end of each calendar year, the pounds emitted for the prior calendar year (Colorado Regulation No. 6, Part B, Section VIII.E.3.c.);
 - ii. Hg Budget Unit operating hours for that quarter (Colorado Regulation No. 6, Part B, Section VII.E.3.d.); and
 - iii. If a continuous Hg monitoring system is used to demonstrate compliance with the Hg monitoring and recordkeeping requirements, total and percentage of monitoring system downtime for that quarter (Colorado Regulation No. 6, Part B, Section VIII.E.3.e.).

17. The boiler covered by this permit is subject to the Particulate Matter emission limit requirements of Colorado Regulation Number 1, Section III.A and the owner or operator shall not cause or permit to be emitted into the atmosphere from any fuel-burning equipment, particulate matter in the flue gases which exceeds the following: (Reference: Colorado Regulation Number 1, Section III.A)
 - a. 0.1 lbs. per MMBtu heat input for fuel burning equipment of greater than 500 MMBtu per hour or more. (Reference: Colorado Regulation Number 1, Section III.A.1.c)

Compliance with the Colorado Regulation No. 1, Particulate Matter Emission Limitation shall be monitored as specified in the Title V Operating Permit 95OPEP106.

18. The boiler covered by this permit is subject to the continuous emission monitoring requirements as set forth in Colorado Regulation Number 1, Section IV.B, 40 CFR Part 60, Subpart D (as adopted by reference in Colorado Regulation Number 6, Part A) and 40 CFR Part 75. Continuous emission monitoring systems for opacity, sulfur dioxides and nitrogen oxides shall meet the requirements specified in the Title V Operating Permit 95OPEP106.

19. The boiler covered by this permit is subject to the Sulfur Dioxide Emission Regulation requirements of Colorado Regulation Number 1, Section VI as follows:
 - a. Existing sources of sulfur dioxide shall not emit sulfur dioxide in excess of the following process-specific limitations. (Heat input rates shall be the manufacturer's guaranteed maximum heat input rates). Units with a heat input from coal or coal-based by-product fuels equal to or greater than 300 MMBtu per hour (Reference: Colorado Regulation Number 1, Section VI.A.3):
 - i. Averaging time - Unless otherwise specified in other sections of the regulation, the averaging time for all sulfur dioxide emissions standards shall be a three-hour rolling average. (Reference: Colorado Regulation Number 1, Section VI.A.1)
 - ii. 1.2 pounds of sulfur dioxide per MMBtu of heat input. (Reference: Colorado Regulation Number 1, Section VI.A.3.a.(ii))

Compliance with the Colorado Regulation No. 1, Sulfur Dioxide Emission Limitation requirements shall be monitored as specified in the Title V Operating Permit 95OPEP106.

20. Colorado Springs Utilities (CSU) shall operate, calibrate, and maintain a continuous in-stack monitoring device for the measurement of opacity. Unless otherwise specified in this permit, the continuous opacity monitor (COM) shall be used to monitor compliance with the 20% and 30% opacity limits set forth above (The requirements for the opacity monitoring system are defined in the Title V Operating Permit 95OPEP106). (Reference: Regulation Number 3, Part B, III.E.)

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

21. This facility is 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 the Title V Operating Permit 95OPEP107.
22. Fuel sampling shall be conducted as specified in the Title V Operating Permit 95OPEP106. (Reference: Regulation Number 3, Part B, III.E.)
23. This source is subject to the New Source Performance Standards requirements of Regulation Number 6, Part A, Subpart D, Standards of Performance for Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971 including, but not limited to, the following:

The requirements below reflect the rule language of 40 CFR Part 60, Subpart D published in the Federal Register on 02/16/2012. However, if revisions to this Subpart are published at a later date, the owner or operator is subject to the requirements contained in the revised version of 40 CFR Part 60, Subpart D.

a. **Standard for particulate matter (PM)** (§60.42):

- i. PM emissions shall not exceed 0.10 lb/MMBtu (§60.42(a)(1)).
- ii. Opacity shall not exceed 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity, except for periods of startup, shutdown, and malfunction (§60.42(a)(2)).

b. **Standard for sulfur dioxide (SO₂)** (§60.43):

- i. SO₂ emissions shall not exceed 1.2 lb/MMBtu (derived from solid fossil fuel) (§60.43(a)(2))

c. **Standard for nitrogen oxides (NO_x)** (§60.44):

- i. NO_x emissions shall not exceed 0.70 lb/MMBtu (derived from solid fossil fuel) (§60.44(a)(3)).

d. **Emissions and fuel monitoring** (§60.45):

- i. Each owner or operator of an affected facility subject to the applicable emission standard shall install, calibrate, maintain, and operate continuous opacity monitoring system (COMS) for measuring opacity and a continuous emissions monitoring system (CEMS) for measuring SO₂ emissions, NO_x emissions, and either oxygen (O₂) or carbon dioxide (CO₂) (§60.45(a)).
- ii. Excess emission and monitoring system performance reports shall be submitted to the Administrator semiannually for each six-month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and monitoring system performance (MSP) report shall include the information required in Sec. 60.7(c).

e. **Test methods and procedures** (§60.46):

- i. In conducting the performance tests required in §60.8, and subsequent performance tests as requested by the EPA Administrator, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (d) of this section (§60.46(a)).

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

- ii. The owner or operator shall determine compliance with the PM, SO₂, and NO_x standards in §§60.42, 60.43, and 60.44 as stated in 40 CFR §60.46(b) (§60.46(b)).
24. The following requirements of Regulation Number 6, Part A, Subpart A, General Provisions, apply as follows:
- a. At all times, including periods of start-up, shutdown, and malfunction, the facility and control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practices for minimizing emissions. Determination of whether or not 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. (Reference: Regulation 6, Part A. General Provisions from 40CFR60.11)
 - b. 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 opacity standard or with a standard, which is based on the concentration of a pollutant in the gases discharged to the atmosphere. (§ 60.12)
 - c. Written notification of construction and initial startup dates shall be submitted to the Division as required under § 60.7.
 - d. Records of startups, shutdowns, and malfunctions shall be maintained, as required under § 60.7.
 - e. Written notification of continuous monitoring system demonstrations shall be submitted to the Division as required under § 60.7.
 - f. Written notification of opacity observation or monitor demonstrations shall be submitted to the Division as required under § 60.7.
 - g. Excess Emission and Monitoring System Performance Reports shall be submitted as required under § 60.7.
 - h. Compliance with opacity standards shall be demonstrated according to § 60.11.
 - i. Continuous monitoring systems shall be maintained and operated as required under § 60.13.

OPERATING & MAINTENANCE REQUIREMENTS

25. The owner or operator shall update the operating and maintenance (O&M) plan, along with a recordkeeping format, that outlines how the applicant will maintain compliance on an ongoing basis with the requirements of this permit. **Compliance with the O&M plan shall commence at startup of the LSD and ACI control devices.** Within one hundred and eighty days (180) after commencement of operation, and completion of the testing period of the LSD and the ACI control devices, the owner or operator shall submit the revised O&M plan to the Division. Failure to submit an acceptable revised operating and maintenance plan could result in revocation of the permit. Note that the Division may modify the monitoring requirements as part of the Title V Operating Permit if this facility is subject to Title V permitting (Reference: Regulation Number 3, Part B, III.E.).

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

COMPLIANCE TESTING AND SAMPLING

Initial Testing Requirements

26. Initial testing is no longer required for this source.

Periodic Testing Requirements

27. Periodic testing shall be in compliance with the requirement of permit Condition 14(a) and 23(e) above.

ADDITIONAL REQUIREMENTS

28. All previous versions of this permit are cancelled upon issuance of this permit.
29. The permit number shall be marked on the subject equipment for ease of identification. (Reference: Regulation Number 3, Part B, III.E.) (State only enforceable)
30. A Revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Regulation Number 3, Part A, Section II.C.)
- a. Annually whenever a significant increase in emissions occurs as follows:

For any criteria pollutant:

For sources emitting **less than 100 tons per year**, a change in actual emissions of five tons per year or more, above the level reported on the last APEN submitted; or

For volatile organic compounds (VOC) and nitrogen oxide (NO_x) sources in an ozone non-attainment area emitting **less than 100 tons of VOC or nitrogen oxide per year**, a change in actual emissions of one ton per year or more or five percent, whichever is greater, above the level reported on the last APEN submitted; or

For sources emitting **100 tons per year or more of a criteria pollutant**, a change in actual emissions of five percent or 50 tons per year or more, whichever is less, above the level reported on the last APEN submitted; or

For sources emitting **any amount of lead**, a change in actual emissions, above the level reported on the last APEN submitted, of fifty (50) pounds of lead

For any non-criteria reportable pollutant:

If the emissions increase by 50% or five (5) tons per year, whichever is less, above the level reported on the last APEN submitted to the Division.

- b. Whenever there is a change in the owner or operator of any facility, process, or activity; or
- c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or
- d. Whenever a permit limitation must be modified; or
- e. No later than 30 days before the existing APEN expires.

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

- 31. All equipment currently covered by the existing Title V permit must comply with all monitoring, reporting, and record keeping requirements outlined in the current Title V Operating Permit (Colorado Regulation No. 3, Part B, Section III.E).
- 32. This source is subject to the provisions of Regulation Number 3, Part C, Operating Permits (Title V of the 1990 Federal Clean Air Act Amendments). The provisions of this construction permit must be incorporated into the operating permit. The application for the modification to the Operating Permit for in relation to Issuance #5 on December 9, 2016 is due within one year of commencement of operation and completion of the testing period of the Lime Spray Dryer Absorber (LSD) and the Activated Carbon Injection (ACI) control devices. The application for the modification to the Operating Permit in relation to this Issuance #6 is due within one year of issuance of this permit.

GENERAL TERMS AND CONDITIONS:

- 33. This permit and any attachments must be retained and made available for inspection upon request. The permit may be reissued to a new owner by the Division as provided in Regulation Number 3, Part B, Section II.B upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.
- 34. If this permit specifically states that final approval has been granted, then the remainder of this condition is not applicable. Otherwise, the issuance of this construction permit is considered initial approval and does not provide "final" approval for this activity or operation of this source. Final approval of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and AQCC Regulation Number 3, Part B, Section III.G. Final approval cannot be granted until the operation or activity commences and has been verified by the APCD as conforming in all respects with the conditions of the permit. Once self-certification of all points has been reviewed and approved by the Division, it will provide written documentation of such final approval. **Details for obtaining final approval to operate are located in the Requirements to Self-Certify for Final Approval section of this permit.** The operator shall retain the permit final approval letter issued by the Division after completion of self-certification with the most current construction permit.
- 35. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit. (Reference: Regulation Number 3, Part B III.E.)

By: 

Danielle Walker
Title V Permit Engineer

By: 

Matthew S. Burgett, P.E.
Title V Operating Permit Unit Supervisor

Permit History

Issuance	Date	Description
Issuance #1	December 17, 1973	Issued to Colorado Springs Utilities
Final Approval	September 26, 1980	
Issuance #2	November 13, 2000	NO _x limit added to permit
Issuance #3	March 9, 2008	SO ₂ 30-day rolling limit added to permit

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

Issuance #5	December 9, 2015	Installation of a new Air Quality Control System (AQCS) comprising a Spray Dryer Absorber (SDA) and an Activated Carbon Injection (ACI); Removal of the SO ₂ 30-day emission limit.
Issuance #5 Revision	June 8, 2016	Revised Condition 27 to require the operating permit modification application to be due within one year after commencement of operation of the SDA and ACI control devices.
Issuance #6	This Issuance	Incorporation of a facility wide sulfur dioxide (SO ₂) emission limitation as required by 40 CFR Part 51, Subpart BB, Data Requirements Rule for the 2010 1-hour sulfur dioxide Primary National Ambient Air Quality Standard (NAAQS) and update the Colorado Regulation No. 6, Part B, Section VIII requirements.

Notes to Permit Holder:

- 1) The production or raw material processing limits and emission limits contained in this permit are based on the production/processing rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedence of any specific emission control regulation or any ambient air quality standard. A revised air pollutant emission notice (APEN) and application form must be submitted with a request for a permit revision. (Reference: Regulation Number 3, Part B II.A.4.)
- 2) This source is subject to the Common Provisions Regulation Part II, Subpart E, Affirmative Defense Provision for Excess Emissions During Malfunctions. The permittee shall notify the Division of any malfunction condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than noon of the next working day, followed by written notice to the Division addressing all of the criteria set forth in Part II.E.1. of the Common Provisions Regulation. See: <https://www.colorado.gov/pacific/cdphe/aqcc-regs>.
- 3) The following emissions of non-criteria reportable air pollutants are estimated based upon the process limits as indicated in this permit. This information is listed to inform the operator of the Division's analysis of the specific compounds emitted if the source(s) operate at the permitted limitations.

AIRS Point	Pollutant	CAS #	Emission Rate
001	Acetaldehyde	75-07-0	463 lbs per year
	Benzene	71-43-2	1,056 lbs per year
	Benzyl Chloride	100-44-7	569 lbs per year
	HCl	7647-01-0	1,149 lbs per year
	HF	7664-39-3	199 lbs per year
	Isophorone	78-59-1	472 lbs per year
	Lead Compounds	0	4.7 lbs per year
	Sulfuric Acid	7664-93-9	37 lbs per year
	Other NCRPs	As reported on the APEN form for the NCRPs emission rates	

- 4) In accordance with C.R.S. 25-7-114.1, each Air Pollutant Emission Notice (APEN) associated with this permit is valid for a term of five years from the date it was received by the Division. A revised APEN shall be submitted no later than 30 days before the five-year term expires. Please refer to the most recent annual fee invoice to determine the APEN expiration date for each emissions point associated with this permit. For any questions regarding a specific expiration date call the Division at (303)-692-3150.

Colorado Springs Utilities
Permit Number 10EP325
ISSUANCE 6

- 5) This facility is classified as follows:

Applicable Requirement	Status
Operating Permit	Major: PM, PM ₁₀ , SO ₂ , NO _x , CO
PSD	Major: PM, PM ₁₀ , SO ₂ , CO, and NO _x

- 6) Full text of the Title 40, Protection of Environment Electronic Code of Federal Regulations can be found at the website listed below:

<http://ecfr.gpoaccess.gov/>

Part 60: Standards of Performance for New Stationary Sources		
NSPS	Subparts D	§60.40- § 60.46
Part 63: National Emission Standards for Hazardous Air Pollutants for Source Categories		
MACT	§63.8980-§63.9985	Subpart UUUUU

- 7) The permit holder is required to pay fees for the processing time for this permit. An invoice for these fees will be issued after the permit is issued. The permit holder shall pay the invoice within 30 days of receipt of the invoice. Failure to pay the invoice will result in revocation of this permit (Reference: Regulation Number 3, Part A, Section VI.B.)
- 8) Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the Division to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.
- 9) Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of a condition hereof shall constitute a rejection of the entire permit and upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to self-certification and final authorization by the Division on grounds set forth in the Colorado Air Pollution Prevention and Control Act and regulations of the AQCC including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action. (Reference: Regulation Number 3, Part B III.F.)
- 10) Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollutant Emission Notice (APEN) must **pay an annual emission fee**. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate.
- 11) Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and Control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.