CONSTRUCTION PERMIT

Permit number: **95MF1040** **Issuance:** **9**

Date issued: November 6, 2019

Issued to: **Colowyo Coal Company, L. P.**

Facility Name: **Colowyo Coal Mine**
Plant AIRS ID: 081/0007 & 103/0327
Physical Location: 5731 State Highway 13, Meeker, CO
County: Moffat and Rio Blanco Counties
General Description: Open Pit Coal Mine

Equipment or activity subject to this permit:

Facility Equipment ID	AIRS Point	Description
South Taylor Pit	**103/0327/001**	An open pit coal mine with a total land area of 12,450 acres, located near the township of Axial, about 28 miles south of Craig, in Moffat County and Rio Blanco County, Colorado. Legal description of this area is: Sections: (13, 14, 15, 22, 23, 24, 27, 28, 33, 34), Township 4 North, Range 93 West of the 6th PM Sections: (2, 3, 4, 8, 9, 10, 11, 14, 15, 16, 17, 19, 20, 21, 22), Township 3 North, Range 93 West, of the 6th PM. Sections: (20, 21, 22), Township 3 North, Range 93 West of the 6th PM.
Colowyo Coal Mine	**081/0007/025, 029, 031**	Coal stockpiles, rock crushing and storage piles, paved access road.
Process equipment, coal loadout	**081/0007/022, 023, 024, 028, 036**	This is a facility-wide permit covering all the equipment/activities at the Colowyo Coal Mine including the mining and reclamation activities in both Moffat and Rio Blanco Counties and the coal processing and train loadout operations in Moffat County. Details of these equipment/activities are given in Attachment A. Specific provisions applicable to these equipment/activities are also included in this attachment. Activities exempt from notification must comply with all other provisions of the regulations.

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

1. Except for with respect to Point 036, this construction permit represents final permit approval to operate this emissions source. Therefore, it is not necessary to self-certify except as described below for Point 036. (Regulation Number 3, Part B, III.G.5)

2. Point 036: Within one hundred and eighty days (180) after commencement of operation or issuance of this permit, whichever is later, compliance with the conditions contained on this permit specific to point 036 must 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 those portions of the permit for point 036 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).

3. Point 036: Within one hundred and eighty days (180) after commencement of operation or issuance of this permit, whichever is later, the operator must complete all initial compliance testing and sampling as required in this permit and submit the results to the Division. (Reference: Regulation Number 3, Part B, III.G.2.)

4. Point 036: The portions of this permit specific to point 036 will expire if the owner or operator of the source for which this permit was issued: (i) does not commence construction/modification or operation of the new fire pump engine under point 036 within 18 months after either the date of issuance of this initial approval permit or the date on which such construction or activity was scheduled to commence as set forth in the permit application associated with this permit; (ii) discontinues construction for a period of eighteen months or more; or (iii) does not complete construction within a reasonable time of the estimated completion date. Upon a showing of good cause by the permittee, the Division may grant extensions of the permit. (Reference: Regulation Number 3, Part B, III.F.4.)

5. Point 036: The manufacturer, model number, serial number, manufactured/reconstructed date and date of original entry into Colorado of the subject equipment must be provided to the Division within one hundred and eighty days (180) after commencement of operation or issuance of this permit, whichever is later. (Reference: Regulation Number 3, Part B, III.G.2.)

6. Point 036: Within thirty (30) days after commencement of operation or issuance of this permit, whichever is later, the AIRS ID number must be marked on the subject equipment for ease of identification. (Reference: Regulation Number 3, Part B, III.E.) (State only enforceable)

EMISSION LIMITATIONS AND RECORDS

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

1 Hour Limits:

AIRS Point	Lbs / hour							Emission Type
	PM	PM_{10}	$PM_{2.5}$	NO_x	SO_2	VOC	CO	
103/0327/001	--	--	--	2,650	--	--	--	Fugitive
081/0007/036	--	--	--	2	--	--	--	Point

8 Hour Limits:

AIRS Point	Lbs / 8 hours							Emission Type
	PM	PM_{10}	$PM_{2.5}$	NO_x	SO_2	VOC	CO	
103/0327/001	--	--	--	--	--	--	16,750	Fugitive

Daily Limits:

AIRS Point	Lbs / day							Emission Type
	PM	PM_{10}	$PM_{2.5}$	NO_x	SO_2	VOC	CO	
103/0327/001	19,990	5,715	700	--	--	--	--	Fugitive
081/0007/022, 023, 024, 028, 036	276	98	25	--	--	--	--	Point
081/0007/025, 029, 031	2,471	622	68	--	--	--	--	Fugitive

The hourly, 8 hour and daily limits included in this permit were developed and are included to prevent the operation from causing or contributing to an exceedance of the National Ambient Air Quality Standards (NAAQS) for the short term limits as applicable.

Details of operations included under AIRS ID numbers are described in Attachment A

Annual Limits:

AIRS Point	Tons per Year							Emission Type
	PM	PM_{10}	$PM_{2.5}$	NO_x	SO_2	VOC	CO	
103/0327/001	3,122.2	912.9	111.0	483.7	--	--	3,056.9	Fugitive
081/0007/022, 023, 024, 028, 036	18.6	6.7	1.4	0.4	--	--	--	Point
081/0007/025, 029, 031	450.8	113.4	12.4	--	--	--	--	Fugitive
TOTAL	3,591.6	1,032.9	124.6	484.0	--	--	3,056.9	All

Note: In the absence of credible evidence to the contrary, compliance with the fugitive emission limits is demonstrated by complying with the production limits on AIRS IDs 103/0327/001, 081/0007/025, 029 and 031, listed below in Condition 9, and by following the attached particulate emissions control plan.

Compliance with the annual limits must 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 must calculate actual emissions each month and keep a compliance record on site or at a local field office with site responsibility for Division review.

The total facility activities resulting in emissions of fugitive particulate matter must be limited by the emission limits specified in Condition 7, and all other activities, operational rates and numbers of equipment as stated in the application. Throughputs indicated in Attachment A are not limits, but are given to indicate the level of activities at the overall process rate limits specified under Condition 9. Records of the actual activities and emissions of criteria (fugitive particulate matter, particulate matter less than 10 µm [PM_{10}], particulate matter less than 2.5 µm) pollutants must be maintained by the applicant and made available to the Division for inspection upon request. Such records must, at the minimum, contain the details given in Attachment A.

Compliance with the point source emission limits for AIRS IDs 022, 023, 024, 028 and 036 must be demonstrated by calculating emissions on a daily, monthly, and rolling 12 month basis. Compliance with both the daily and annual point source criteria pollutant emission limits must be based on multiplying the actual production as defined in Condition 9, the emission factors and applying the control efficiency values for each AIRS ID as defined in Attachment A. Annual actual limits must be recorded in a rolling twelve month total format.

The particulate emission control measures listed in Attachment B (as proposed in the Air Pollutant Emission Notice(s)/Particulate Emission Control Plan submitted to the Division) must be applied to the particulate emission producing sources as required by Regulation Number 1.

All emission calculations must be made using the emission factors and format specified in Attachment A. The owner or operator must submit an Air Pollutant Emission Notice (APEN) and receive a modified permit prior to the use of any other method of calculating emissions.

8. The control practices and equipment, as described in Attachments A and B, must be maintained and operated to ensure satisfactory performance. The owner or operator must monitor compliance with this condition through the results of approved compliance tests (when required), compliance with the Operating and Maintenance Plan, compliance records, and other methods as approved by the Division. (Reference: Regulation Number 3, Part B, III.E.)

PROCESS LIMITATIONS AND RECORDS

9. This source must be limited to the following maximum consumption, processing and/or operational rates as listed below. Daily and Annual records of the actual process rate must be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation Number 3, Part B, II.A.4)

Process/Consumption Limits

Facility Equipment ID	AIRS Point	Process Parameter	Annual Limit	Daily Limit
Mining: General	**103/0327/001**	Overburden Stripping: Drilling, Blasting, Excavation (with draglines/shovels/ scrapers/dozers/front -end loaders), Reclamation, Hauling (240-ton haul trucks).	94,896,300 tons of topsoil and overburden	318,789 tons of topsoil and overburden
Coal Extraction		Extraction of coal from the open pit mine	4,000,000 tons	13,300 tons
Explosives use		Explosives use (Area of blasting must not exceed 250,000 sq. ft. for any single blast.)	91,250 tons of explosives	One blast per day (See South Taylor Blasting Schedule on page 6 for daily limit on explosives tonnage.)
Wind Erosion		Areas subject to Wind Erosion	2,014 acres	2,014 acres
005 Crusher	**081/0007/022**	Coal crushing	4,000,000 tons of coal	33,600 tons of coal
006 Crusher	**081/0007/023**	Secondary coal crushing	4,000,000 tons of coal	36,000 tons of coal
Railcar Loading	**081/0007/024**	Railcar loading of coal	9,000,000 tons of coal	30,000 tons of coal
Wind Erosion	**081/0007/025**	Coal Stockpiles	42 acres	42 acres
Rock crusher	**081/0007/028**	Rock crushing and screening for haul road maintenance	600,000 tons	3,000 tons
Fire Pump Engine	**081/0007/036**	Hours of fire pump engine operation	500 hours	24 hours

The daily limits included in this permit were developed and are included to prevent the operation from causing or contributing to an exceedance of the National Ambient Air Quality Standards (NAAQS) for the short term limits.

South Taylor Blasting Schedule: Blasting must only occur between the hours as indicated in this table. The date and time of any blast must be documented. This documentation must be maintained and made available to the Division for inspection upon request. (Reference: Regulation Number 3, Part B, III.I.6.b.)

Hour of Day (Ending of Hour Period)	Maximum Allowable Blast (lbs ANFO)			
	Winter (Dec-Feb)	Spring (Mar-May)	Summer (Jun-Aug)	Fall (Sep-Nov)
Midnight – 08:00	--	--	--	--
09:00	--	--	500,000	500,000
10:00	--	500,000	500,000	500,000
11:00	500,000	500,000	500,000	500,000
12:00	500,000	500,000	500,000	500,000
13:00	500,000	500,000	500,000	500,000
14:00	500,000	500,000	500,000	500,000
15:00	175,000	500,000	500,000	500,000
16:00	175,000	500,000	500,000	500,000
17:00	--	500,000	500,000	500,000
18:00 - Midnight	--	--	--	--

Maximum daily ANFO usage is limited to one blast per day with maximum daily ANFO use not to exceed 500,000 lbs (250 tons).

Compliance with the yearly process limits must 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 must calculate monthly process rates and keep a compliance record on site or at a local field office with site responsibility, for Division review.

10. In addition to the blasting schedule, blasting activity is limited by the following:

    a. Blasting at the South Taylor Pit must not occur during the same hour as any blasting at the Collom Expansion.

    b. All other mining activities within the active pit area must halt during blasting events.

STATE AND FEDERAL REGULATORY REQUIREMENTS

11. With the exception of fugitive particulate emissions, visible emissions must not exceed twenty percent (20%) opacity during normal operation. During periods of startup, process modification, or adjustment of control equipment visible emissions must not exceed 30% opacity for more than six minutes in any sixty consecutive minutes. Opacity must be determined using EPA Method 9. (Reference: Regulation Number 1, II.A.1. & 4.)

12. This source is subject to the odor requirements of Regulation Number 2. (State only enforceable)

13. AIRS point IDs 022, 023 and 024 are subject to Regulation Number 6, Part A, Subpart Y- Standards of Performance for Coal Preparation Plants, including, but not limited to, the following:

[The requirements below reflect the rule language of 40 CFR Part 60 Subpart Y published in the Federal Register on 10/8/2009. However, if revisions to this Subpart are published at a later date, the owner or operator is subject to the applicable requirements contained in the revised version of 40 CFR 60, Subpart Y]

a. Discharge of gases into the atmosphere from transfer points must not exhibit 20% opacity or greater. (Reference: 40 CFR§ 60.254(a))

In addition, the following requirements of Regulation Number 6, Part A, Subpart A, General Provisions, apply to AIRS IDs 022, 023, and 024:

b. At all times, including periods of start-up, shutdown, and malfunction, the facility and control equipment must, 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 Number 6, Part A. General Provisions from 40 CFR 60.11

c. No article, machine, equipment or process must be used to conceal an emission that 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 that is based on the concentration of a pollutant in the gases discharged to the atmosphere. (§ 60.12)

d. Records of startups, shutdowns, and malfunctions must be maintained, as required under § 60.7.

e. Compliance with opacity standards in must be demonstrated according to § 40 CFR 60.11.

14. The emergency fire pump engine installed under AIRS point ID 036 must comply with all relevant requirements of Colorado Regulation Number 6, Part A, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE). Any relevant EPA engine tier certification forms must be provided to the Division within one hundred and eighty days (180) after commencement of operation.

OPERATING & MAINTENANCE REQUIREMENTS

15. The owner or operator must follow the most current operating and maintenance (O&M) plan and recordkeeping format approved by the Division in order to demonstrate compliance on an ongoing basis with the requirements of this permit. Revisions to the O&M plan are subject to Division approval prior to implementation. 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.G.2.).

COMPLIANCE TESTING AND SAMPLING

Initial Testing Requirements

16. Point 036: Within 180 days of equipment startup, the owner or operator must demonstrate compliance with Condition 11, using EPA Method 9 to measure opacity from the fire pump engine. This measurement must consist of a minimum twenty-four consecutive readings taken at fifteen second intervals over a 6 minute period. (Reference: Regulation Number 1, II.A.1 & 4)

Periodic Testing Requirements

17. AIRS ID Points 022, 023 and 024: These processing units are subject to the periodic testing requirements of 40 CFR Part 60, Subpart Y, as referenced in Condition 13.

NSPS Subpart Y:

The required opacity measurement must consist of consecutive readings taken at fifteen second intervals over a one hour period (ten 6-minute averages). If, during the initial 30 minutes of the Method 9 observation, 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 (Reference 40 CFR § 60.257(a)(1)).

18. Monitoring ambient concentrations and source impacts for Particulate Matter less than 10 µm aerodynamic diameter [PM10] must be conducted as per the monitoring plan approved by the Division. Such monitoring must be conducted under conditions representative of this permit. Results of such monitoring must be reported to the Division on a quarterly basis within thirty (30) days of the end of the quarter. Upon satisfactory demonstration of compliance with the standards for one year at a production rate of, at least 85 % of the daily permitted limits, and that the ambient concentrations projected for 100 % of the daily permitted limits are below the standards, the permittee may approach the Division for withdrawal of further monitoring requirements.

Such data must be valid as long as the activity rates do not exceed the activity rates under which such monitoring was conducted. If the activities increase, and in the analysis of the Division, there is a likelihood of possible violations of National Ambient Air Quality Standards, additional monitoring may be required.

ADDITIONAL REQUIREMENTS

19. All previous versions of this permit are cancelled upon issuance of this permit.

20. The permit number of this pit must be displayed in an easily observable location for ease of identification. This permit number may be posted with permit number 16MF1324F at the entrance to the mine access road. (Reference: Regulation Number 3, Part B, III.E.) (State only enforceable)

21. The AIRS ID number must be marked on the subject process equipment (AIRS ID points 022, 023, 024, 028, and 036) for ease of identification. (Reference: Regulation Number 3, Part B, III.E.) (State only enforceable)

22. A Revised Air Pollutant Emission Notice (APEN) must be filed: (Reference: Regulation Number 3, Part A, II.C.)

    a. By April 30 of the year following a significant increase in emissions. A significant increase in emissions is defined 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 (NOx) 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.

23. Public access must be precluded in all areas within the modeling receptor exclusion zone as submitted with the modeling in the application. The exclusion zone must be fenced except for areas where the terrain inhibits access, and the perimeter must be posted with no trespassing signs. See Attachment C for boundaries of the exclusion zone. (Reference: Regulation Number 3, Part B, III.B.5)

24. The emergency engine installed under AIRS point ID 036 must not emit the following pollutants at a greater rate than listed, as indicated by the manufacturer. The manufacturer's specification sheet confirming these emission factors must be provided to the Division within one hundred and eighty days (180) after commencement of operation of the engine.

NOx:	1.333	lbs per hour
CO:	0.153	lbs per hour
SO_2:	0.0396	lbs per hour
PM_{10}:	0.0437	lbs per hour
$PM_{2.5}$:	0.0437	lbs per hour

25. The following operational restrictions are based on the National Ambient Air Quality Standards (NAAQS) compliance demonstration.

a. Dayshift activities must only be performed between the hours of 8 AM and 8 PM. These activities include:

- Hauling topsoil from Topsoil Piles to West Pit Reclamation
- Hauling topsoil from Topsoil South Taylor Active area to Topsoil Pile
- South Taylor Active area Water Trucks support topsoil activities
- South Taylor Active area Rental Scraper activities
- West Pit Reclamation Rental Scraper activities (topsoil only)
- West Pit Reclamation unloading topsoil trucks (topsoil only)
- Topsoil Pile loading topsoil for West Pit Reclamation
- South Taylor Active area loading topsoil to trucks via front end loader
- Topsoil Pile unloading South Taylor Active area topsoil
- Rock crushing

b. Overburden must not be transported from both West Pit Reclamation and South Taylor Spoils to the East Pit concurrently.

c. The temporary (rental) scraper fleet must not operate in both the South Taylor Active and West Pit Reclamation areas at the same time.

d. A maximum of two drills may operate at the South Taylor pit concurrently.

e. Diesel fuel used by all non-road engines operating on-site must have a sulfur content of 15 ppm or lower. Records of diesel fuel deliveries must be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation Number 3, Part B, III.I.6.b.)

GENERAL TERMS AND CONDITIONS:

26. 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, II.B upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.

27. 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, 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 must retain the permit final approval letter issued by the Division after completion of self-certification with the most current construction permit.

28. 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(ies) specifically identified in this permit. If subsequent operations or testing at the source indicate the information supplied to obtain this permit and relied upon in the creation and issuance of this permit is inaccurate, the source must submit an application to modify the permit to address the inaccuracy(ies). (Reference: Regulation Number 3, Part B III.E.)

By: Jonathan Brickey, P.E.
Permit Engineer

By: R K Hancock III, P.E.
Construction Permits Unit Supervisor

Permit History

Issuance	Date	Description
Issuance #1	February 5, 1997	Pertained to cancellation of all previous permits.
Issuance #2 – Initial Approval Modification	March 09, 1998	Pertained to use of enclosure for control of emissions from coal preparation-primary crusher house (AIRS ID: 022) during November- April months. (Freezing conditions)
Issuance #3 - Modification	(Not Issued)	Increasing speed limit for "In pit" haulage to 45 mph and adding a reference to 190 and 240 Ton haulage trucks.
Issuance #4 - Final Approval and Modification	November 23, 1998	For emissions sources under AIRS ID: 023, use of atomizing spray muzzles is not required under freezing conditions. Emission control for transfer from conveyor to stacking tube (Referenced in Attachment E) stands corrected to baghouse.
Issuance #5 – Final Approval Modification	September 20, 2001	Administrative revision to modify [then] Condition 7 to provide for average daily emissions to be calculated from the monthly extraction amounts.
95MF1040: Issuance #6 – Final Approval Modification 06RB1317: Issuance #1 – Initial Approval	June 6, 2007	Administrative revisions to modify [then] Condition 7 to conform to Attachment F demonstrating the gradual reduction in extraction of coal to mine "End of Life". All emissions will also be gradually reduced until mining in the Moffat County, ColoWyo Pit and all subsequent restoration, reclamation and revegetation has been completed. Coal processing emissions shall continue to be limited by this permit. Overburden removal by 50 ton trucks deleted.

Permit History (continued)

Issuance #7 - Final Approval Modification 6	January 17, 2017	Issued to Colowyo Coal Company, L. P. combines the permits 95MF1040 and 06RB1317. Permit 06RB1317 is cancelled. Modification based on dust mitigation plan, reduction in blasting materials use. Increase in daily explosives use limit from 76 tons per day to 350 tons per day. Issue as Final Approval under 95MF1040.
Issuance #8 – Final Approval Modification 7	October 25,2017	Issued to Colowyo Coal Company, L. P. to make changes to the explosives use blasting schedule and to make minor adjustments to the emission factors, production limit values and emission limits.
Issuance #9	This Issuance	Reduction in permitted daily and annual explosives use with corresponding reduction in emission limits. Fire pump engine added to permit.

Notes to Permit Holder (as of date of permit issuance):

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 must 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 emission levels contained in this permit are based on emission factors as referenced in Attachment A.

4) The following equipment is currently exempt from construction permitting requirements and/or APEN reporting requirements based on information provided by the operator for the Division's analysis:

AIRS ID	Facility ID	Description	Notes	
081/0007/027	Mine access road	Vehicle Traffic: Light/Medium Vehicles, Mine access road.	APEN Exempt Permit Exempt	This unit is exempt from reporting requirements because the emissions of all pollutants are below the reporting levels. (Regulation Number 3, Part A, Section II.D.1.a).

5) 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 must 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.

6) This facility is classified as follows:

Applicable Requirement	Status
Operating Permit	Minor Source for all pollutants.
PSD	Minor Source for all pollutants.

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

http://www.ecfr.gov/cgi-bin/text-idx?gp=&SID=2a3fbebe8f5c2f47006ad49ae4b4c080&mc=true&tpl=/ecfrbrowse/Title40/40tab_02.tpl

Part 60: Standards of Performance for New Stationary Sources		
NSPS	60.250 – 60.258	Subpart Y
NSPS	60.4200-60.4219	Subpart IIII

8) 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. Failure to pay the invoice will result in revocation of this permit. The permit holder must pay the invoice within 30 days of receipt of the invoice (Reference: Regulation Number 3, Part A, VI.B.).

9) 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.

10) 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 must constitute a rejection of the entire permit and upon such occurrence, this permit must 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.)

11) 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.

12) 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.

ATTACHMENT A (Annual Emissions)											
Facility ID	Point ID #	Process description	Pollutant	Emission factor		Control type	Est. Control %	Annual Throughput (units/year)		Inventory Emissions (tons/year)	Fugitive Report (Y/N)
-	103/0327/001	Overburden Stripping: Drilling, Blasting, Excavation (with draglines/shovels/ scrapers/dozers/front-end loaders), Hauling (240-ton haul trucks), Reclamation Coal Extraction: Drilling, Blasting, Excavation/ Loading with front-end-loaders, Hauling (240-ton trucks) Haul Road Maintenance: Leveling/Graders Overburden Disposal: By dragline and truck-shovel operation, Unloading from trucks onto spoil slopes	PM	0.2405	lbs/ton mined	Water sprays, stabilizers for the purposes of dust suppression on unpaved roads. Water injection & dust shroud for drills. Sequential blasting (delay detonation). Restrict traffic to established roads.	73.74%	98,896,300	tons mined	3,122.2	Y
			PM_{10}	0.0642	lbs/ton mined		71.21%	98,896,300	tons mined	912.9	Y
			$PM_{2.5}$	0.0069	lbs/ton mined		67.46%	98,896,300	tons mined	111.0	Y
		Ammonium Nitrate and Fuel Oil	NOx	10.600	lbs/ton	None	0.00%	91,250	tons	483.6	Y
		Ammonium Nitrate and Fuel Oil	CO	67.000	lbs/ton	None	0.00%	91,250	tons	3,056.9	Y
		Ammonium Nitrate and Fuel Oil	SOx	0.006	lbs/ton	None	0.00%	91,250	tons	0.3	Y
Annual numbers may not demonstrate the Inventory Emissions if the Emission factor times the production or throughput calculation is performed. This is because the annual activity rates for some sources are not directly tied to their daily rates.											

ATTACHMENT A (Annual Emissions)											
Facility ID	Point ID #	Process description	Pollutant	Emission factor		Control type	Estimated Control %	Annual Throughput (units/year)		Inventory Emissions (tons/year)	Fugitive Report (Y/N)
005 Crusher	081/0007/022	Receiving hopper, and Grizzly. One (1) Stamler, Model: BF-14D-G-10, S/N: 11780, Primary crusher, Covered belt conveyor system, Coal storage bin with telescoping discharge chute for loading of haul trucks.	PM	0.0237	lbs/ton shipped	Atomizing spray, enclosed conveyor	75.24%	4,000,000	tons shipped	11.8	N
			PM_{10}	0.0075	lbs/ton shipped	See PM Control	74.93%	4,000,000	tons shipped	3.8	N
			$PM_{2.5}$	0.0012	lbs/ton shipped	See PM Control	73.61%	4,000,000	tons shipped	0.7	N
006 Crusher	081/0007/023	Receipt of primary crushed coal: One (1) Carmon, Model: 5536, and S/N: not available, feeder for feeding primary crushed coal to secondary crusher. One (1) Kopper, Model: not available, and S/N: 180, hammer ring type secondary crusher.	PM	0.0579	lbs/ton shipped	Baghouse, water/chemical suppression	95.43%	4,000,000	tons shipped	5.3	N
			PM_{10}	0.0231	lbs/ton shipped	See PM Control	95.19%	4,000,000	tons shipped	2.3	N
			$PM_{2.5}$	0.0202	lbs/ton shipped	See PM Control	98.58%	4,000,000	tons shipped	0.6	N
Annual numbers may not demonstrate the Inventory Emissions if the Emission factor times the production or throughput calculation is performed. This is because the annual activity rates for some sources are not directly tied to their daily rates.											

ATTACHMENT A (Annual Emissions)										
Facility ID	Point ID #	Process description	Pollutant	Emission factor		Control type	Estimated Control %	Annual Throughput (units/year)		Inventory Emissions (tons/year)	Fugitive Report (Y/N)
006 Loadout	081/0007/024	Train Loading: Coal	PM	0.00035	lbs/ton loaded	Enclosure, water suppression	95.00%	9,000,000	tons loaded	0.1	N
			PM_{10}	0.00017	lbs/ton loaded	See PM Control	95.00%	9,000,000	tons loaded	0.0	N
			$PM_{2.5}$	0.00003	lbs/ton loaded	See PM Control	95.00%	9,000,000	tons loaded	0.0	N
-	081/0007/025	Coal Storage piles, includes dozer operations at 8760 hours per year.	PM	18,361.6	lbs/acre year	Watering, chemical stabilizer	0.00%	41.44	Acre-years	380.5	Y
			PM_{10}	4,786.7	lbs/acre year	See PM Control	0.00%	41.44	Acre-years	99.2	Y
			$PM_{2.5}$	427.6	lbs/acre year	See PM Control	0.00%	41.44	Acre-years	8.9	Y
025 Rock Crusher	081/0007/028	Processing of rock for haul road maintenance.	PM	0.0319	lbs/ton processed	Water/chemical spray bars	84.90%	600,000	tons	1.5	N
			PM_{10}	0.0118	lbs/ton processed	See PM Controls	83.48%	600,000	tons	0.6	N
			$PM_{2.5}$	0.0113	lbs/ton processed	See PM Controls	97.74%	600,000	tons	0.1	N
Annual numbers may not demonstrate the Inventory Emissions if the Emission factor times the production or throughput calculation is performed. This is because the annual activity rates for some sources are not directly tied to their daily rates.											

ATTACHMENT A (Annual Emissions)											
Facility ID	Point ID #	Process description	Pollutant	Emission factor		Control type	Estimated Control %	Annual Throughput (units/year)		Inventory Emissions (tons/year)	Fugitive Report (Y/N)
-	081/0007/029	Rock Storage Piles (No credit taken for control application.)	PM	760.000	lb/acre-yr	Watering as needed, chemical stabilizer	0.00%	2	acres	0.8	Y
			PM_{10}	266.000	lb/acre-yr	See PM Controls	0.00%	2	acres	0.3	Y
			$PM_{2.5}$	40.280	lb/acre-yr	See PM Controls	0.00%	2	acres	0.1	Y
-	081/0007/031	Fugitive emissions associated with hauling coal from the primary crusher to the secondary crusher area and the coal pile acreage at the loadout tube.	PM	0.0625	lbs/mile travelled	Paved Roads	0.00%	2,226,631	miles travelled	69.6	Y
			PM_{10}	0.0125	lbs/mile travelled		0.00%	2,226,631	miles travelled	14.0	Y
			$PM_{2.5}$	0.0031	lbs/mile travelled		0.00%	2,226,631	miles travelled	3.5	Y
-	081/0007/036	One (1) emergency fire pump engine. Make, model, and serial number TBD.	NOx	1.333	lb/hour	None	0.00%	500	hours	0.4	N
END ANNUAL EMISSIONS											
Annual numbers may not demonstrate the Inventory Emissions if the Emission factor times the production or throughput calculation is performed. This is because the annual activity rates for some sources are not directly tied to their daily rates.											

ATTACHMENT A (Daily Emissions)											
Facility ID	Point ID #	Process description	Pollutant	Emission factor		Control type	Est. Control %	Daily Throughput (units/day)		Inventory Emissions (lbs/day)	Fugitive Report (Y/N)
-	103/0327/001	Overburden Stripping: Drilling, Blasting, Excavation (with draglines/shovels/ scrapers/dozers/front-end loaders), Hauling (240-ton haul trucks) Coal Extraction: Drilling, Blasting, Excavation/ Loading with front-end-loaders, Hauling (240-ton trucks) Haul Road Maintenance: Leveling/Graders Overburden Disposal: By dragline and truck-shovel operation, Unloading from trucks onto spoil slopes	PM	0.2386	lbs/ton mined	Water sprays, stabilizers for the purposes of dust suppression on unpaved roads. Water injection & dust shroud for drills. Sequential blasting (delay detonation). Restrict traffic to established roads.	74.76%	332,089	tons mined	20,766	Y
			PM_{10}	0.0631	lbs/ton mined		72.70%	332,089	tons mined	6,408	Y
			$PM_{2.5}$	0.0068	lbs/ton mined		68.83%	332,089	tons mined	672	Y
		Ammonium Nitrate and Fuel Oil	NOx	10.600	lbs/ton	None	0.00%	250	tons	2,650	Y
		Ammonium Nitrate and Fuel Oil	CO	67.000	lbs/ton	None	0.00%	250	tons	16,750	Y
		Ammonium Nitrate and Fuel Oil	SOx	0.006	lbs/ton	None	0.00%	250	tons	1.5	Y

ATTACHMENT A (Daily Emissions)											
Facility ID	Point ID #	Process description	Pollutant	Emission factor		Control type	Estimated Control %	Daily Throughput (units/day)		Inventory Emissions (lbs/day)	Fugitive Report (Y/N)
005 Crusher	081/0007/022	Receiving hopper, and Grizzly. One (1) Stamler, Model: BF-14D-G-10, S/N: 11780, Primary crusher, Covered belt conveyor system, Coal storage bin with telescoping discharge chute for loading of haul trucks.	PM	0.0237	lbs/ton shipped	Atomizing spray, enclosed conveyor	75.23%	33,600	tons shipped	198	N
			PM_{10}	0.0075	lbs/ton shipped	See PM Control	74.92%	33,600	tons shipped	63	N
			$PM_{2.5}$	0.0012	lbs/ton shipped	See PM Control	73.61%	33,600	tons shipped	11	N
Facility ID	Point ID #	Process description	Pollutant	Emission factor		Control type	Estimated Control %	Daily Throughput (units/day)		Inventory Emissions (lbs/day)	Fugitive Report (Y/N)
006 Crusher	081/0007/023	Receipt of primary crushed coal: One (1) Carmon, Model: 5536, and S/N: not available, feeder for feeding primary crushed coal to secondary crusher. One (1) Kopper, Model: not available, and S/N: 180, hammer ring type secondary crusher.	PM	0.0537	lbs/ton shipped	Baghouse, water/chemical suppression	96.93%	36,000	tons shipped	60	N
			PM_{10}	0.0215	lbs/ton shipped	See PM Control	96.76%	36,000	tons shipped	25	N
			$PM_{2.5}$	0.0201	lbs/ton shipped	See PM Control	98.74%	36,000	tons shipped	10	N

ATTACHMENT A (Daily Emissions)										
Facility ID	Point ID #	Process description	Pollutant	Emission factor		Control type	Estimated Control %	Daily Throughput (units/day)		Inventory Emissions (lbs/day)	Fugitive Report (Y/N)
006 Loadout	081/0007/024	Train Loading: Coal	PM	0.00035	lbs/ton loaded	Enclosure, water suppression	95.00%	30,000	tons loaded	0.6	N
			PM_{10}	0.00017	lbs/ton loaded	See PM Control	95.00%	30,000	tons loaded	0.3	N
			$PM_{2.5}$	0.00003	lbs/ton loaded	See PM Control	95.00%	30,000	tons loaded	0.1	N
Facility ID	Point ID #	Process description	Pollutant	Emission factor		Control type	Estimated Control %	Daily Throughput (units/day)		Inventory Emissions (lbs/day)	Fugitive Report (Y/N)
-	081/0007/025	Coal Storage piles, includes dozer operations at 8760 hours per year.	PM	50.3056	lbs/acre-day	Watering, chemical stabilizer	0.00%	41.44	acres	2,084.7	Y
			PM_{10}	13.1143	lbs/acre-day	See PM Control	0.00%	41.44	acres	543.5	Y
			$PM_{2.5}$	1.1713	lbs/acre-day	See PM Control	0.00%	41.44	acres	48.6	Y
Facility ID	Point ID #	Process description	Pollutant	Emission factor		Control type	Estimated Control %	Daily Throughput (units/day)		Inventory Emissions (lbs/day)	Fugitive Report (Y/N)
025 Rock Crusher	081/0007/028	Processing of rock for haul road maintenance.	PM	0.0319	lbs/ton processed	Water/chemical spray bars	84.91%	3,000	tons	14.4	N
			PM_{10}	0.0118	lbs/ton processed	See PM Controls	83.49%	3,000	tons	5.9	N
			$PM_{2.5}$	0.0113	lbs/ton processed	See PM Controls	97.74%	3,000	tons	0.8	N

ATTACHMENT A (Daily Emissions)											
Facility ID	Point ID #	Process description	Pollutant	Emission factor		Control type	Estimated Control %	Daily Throughput (units/day)		Inventory Emissions (lbs/day)	Fugitive Report (Y/N)
-	081/0007/029	Rock Storage Piles (No credit taken for control application.)	PM	2.0822	lbs/acre-day	Watering as needed, chemical stabilizer	0.00%	2	acres	4.2	Y
			PM_{10}	0.7288	lbs/acre-day	See PM Controls	0.00%	2	acres	1.5	Y
			$PM_{2.5}$	0.1104	lbs/acre-day	See PM Controls	0.00%	2	acres	0.3	Y
Facility ID	Point ID #	Process description	Pollutant	Emission factor		Control type	Estimated Control %	Daily Throughput (units/day)		Inventory Emissions (lbs/day)	Fugitive Report (Y/N)
-	081/0007/031	Fugitive emissions associated with hauling coal from the primary crusher to the secondary crusher area and the coal pile acreage at the loadout tube.	PM	0.0636	lbs/mile travelled	Paved Roads	0.00%	6,100	miles travelled	381.3	Y
			PM_{10}	0.0126	lbs/mile travelled		0.00%	6,100	miles travelled	76.3	Y
			$PM_{2.5}$	0.0031	lbs/mile travelled		0.00%	6,100	miles travelled	18.8	Y
END DAILY EMISSIONS.											

ATTACHMENT B

PARTICULATE EMISSIONS CONTROL PLAN FOR MINING ACTIVITIES

THE FOLLOWING PARTICULATE EMISSIONS CONTROL MEASURES MUST BE USED FOR COMPLIANCE PURPOSES ON THE ACTIVITIES COVERED BY THIS PERMIT, AS REQUIRED BY THE AIR QUALITY CONTROL COMMISSION REGULATION NUMBER 1, SECTION III.D.1.b. THIS SOURCE IS SUBJECT TO THE FOLLOWING EMISSION GUIDELINES WHICH MAY BE ENFORCED ONLY AS PROVIDED IN REGULATION NUMBER 1, SECTION III.D.1.e:

a. **Mining Activities -** Visible emissions not to exceed 20% opacity, no off-property transport of visible emissions.

b. **Haul Roads -** No off-property transport of visible emissions must apply to on-site haul roads, the nuisance guidelines must apply to off-site haul roads.

c. **Haul Trucks -** There must be no off-property transport of visible emissions from haul trucks when operating on the property of the owner or operator. There must be no off-vehicle transport of visible emissions from the material in the haul trucks when operating off of the property of the owner or operator.

d. **Blasting Activities** - Only the no off-property transport emission limitation guideline must apply to blasting activities. (Reference: Regulation Number 1, Section III.D.2.i.(iii))

Control Measures

1. Adequate soil moisture must be maintained in topsoil and overburden to control emissions during removal. Watering must be implemented if necessary.

2. Topsoil stockpiles must be compacted and revegetated within one year of placement.

3. Emissions from material handling (i.e. removal, loading, and hauling) must be controlled by watering unless natural moisture is sufficient to control emissions.

4. Unpaved haul roads must be treated with chemical stabilizer per manufacturer's recommendations and watered as often as needed to control fugitive particulate emissions. This control measure does not apply to haul roads located at the base of the pit which are created on a temporary ad hoc basis. These in-pit roads must be watered as needed to control fugitive particulate emissions.

5. Reclamation works and sequential extraction of material must be initiated to keep the total disturbed areas at any one time to a minimum.

6. Coal stockpiles must be treated with chemical crusting agents and watered as needed to control fugitive particulate emissions.

7. Drilling of overburden for blasting, must employ hoods and water spray units. Coal drilling must utilize deflector plates to localize particle distribution around each drill hole.

8. Sequential blasting must be implemented for particulate reduction. No blasting must take place when wind speeds exceed 30 MPH.

ATTACHMENT C

Collom-Colowyo Fenceline and Ambient Air Boundary