



State of Utah

GARY R. HERBERT
Governor

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Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-AN100920001-15

July 13, 2015

Carl Winters
Canyon Fuel Company, LLC
A Subsidiary of Bowie Resource Partners, LLC
HCR 35, Box 380
Helper, UT 84526

Dear Mr. Winters:

Re: Approval Order: Modification to Approval Order DAQE-AN0092007-03 to Increase Haulage of Coal and to Add Stacking Tube
Project Number: N10092-0001

The attached document is the Approval Order for the above-referenced project. Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. The project engineer for this action is Mr. Maung Maung, who may be reached at (801) 536-4153.

Sincerely,

Bryce C. Bird
Director

BCB:MM:kw

cc: Southeastern Utah District Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**APPROVAL ORDER: Modification to Approval Order DAQE-
AN0092007-03 to Increase Haulage of Coal and
to Add Stacking Tube**

**Prepared By: Mr. Maung Maung, Engineer
Phone: (801) 536-4153
Email: mmaung@utah.gov**

APPROVAL ORDER NUMBER

DAQE-AN100920001-15

Date: July 13, 2015

Canyon Fuel Company, LLC

Skyline Mines

Source Contact:

Jeremiah Armstrong, Environmental Compliance Manager

Phone: (435) 448-2645

Email: jarmstrong@bowieresources.com



**Bryce C. Bird
Director**

Abstract

Canyon Fuel Company has requested a modification to its existing AO DAQE-AN0092007-03. The proposed modification would consist of the following: 1) the installation of additional tube stacker chute and associated coal conveyor extension; 2) an increase in the truck haulage at each of the existing truck load-outs, and the conversion of the rail load-out, including an associated conveyor extension, to allow loading and haulage by truck in addition to railcars; and 3) the removal of the 4 million tons per year coal throughput limits for each of the individual stockpiles.

The Skyline Mines is located in Carbon County which is an attainment area of the NAAQS for all pollutants. NSPS subpart Y regulations apply to this source. NESHAP and MACT regulations do not apply to this source. Title V of the CAAA applies to this source as an area source.

The recalculated PTEs totals of NO_x, SO₂, VOC and CO for the existing AO (as submitted in the latest NOI) are different from the past calculated PTEs for the existing AO. In another words, recalculated PTEs for the source are lower for NO_x, SO₂ and VOC, and higher for the CO than the PTEs in the existing AO. The PTEs of PM₁₀ and PM_{2.5} which was not identified before are higher than the PTEs in the existing AO. It is not clear how this situation of differences came about. However, it could possibly be the emission factors may have changed over time, and different assumptions were used in preparations for the previous modifications. The new calculations have been checked and verified. The assumptions and the calculations in the latest NOI are accurate. The recalculated emissions along with the new resulting PTEs are acceptable.

The emission increase of PM₁₀ triggers air dispersion modeling per air quality rules R307-410-3. The modeling was performed, and the result indicated that there will be no violation of the NAAQS.

The emissions, in TPY, will increase as follows: PM₁₀ = 11.42, PM_{2.5} = 2.28.

The increases in emissions, in TPY, will change the potential to emit totals as follows: PM₁₀ = 22.90, PM_{2.5} = 5.01, NO_x = 12.33, CO = 10.36, SO₂ = 0.07, VOC = 0.68, formaldehyde = 0.01, hexane = 0.22, Total HAPs = 0.23 and CO₂ e = 14,893. PM_{2.5} emissions are a subset of PM₁₀ emissions.

This air quality AO authorizes the project with the following conditions and failure to comply with any of the conditions may constitute a violation of this order. This AO is issued to, and applies to the following:

Name of Permittee:	Permitted Location:
Canyon Fuel Company, LLC A Subsidiary of Bowie Resource Partners, LLC HCR 35, Box 380 Helper, UT 84526	Skyline Mines Eccles Canyon Scofield, UT 84526

UTM coordinates: 482,700 m Easting, 4,392,500 m Northing, UTM Zone 12
SIC code: 1222 (Bituminous Coal Underground Mining)

Section I: GENERAL PROVISIONS

- I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
- I.2 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
- I.3 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]

- I.4 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
- I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
- I.6 The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
- I.7 The owner/operator shall comply with UAC R307-150 Series. Inventories, Testing and Monitoring. [R307-150]

Section II: SPECIAL PROVISIONS

II.A The approved installations shall consist of the following equipment:

- II.A.1 **Canyon Fuel Company - Skyline Mines**
An underground coal mine
- II.A.2 **Main Conveyor (8,000,000 tons per year throughput)**
Drive - Long Airdox, 84 inches wide, 2,000 HP
Rollers - Continental Conveyor, 84 inches wide
Belt - George Duck Belt
- II.A.3 **Two Crushers (1,500 tph throughput each)**
Jeffrey Flex Tooth, 611 Feet Flextooth
Gundlach Roll, 4060-S-2159
- II.A.4 **Two Screens (70 tph throughput each)**
Thunderbird, 5162.4-14 Inclined Screen
Allis Minerals, Low-Head Horizontal Screen
- II.A.5 **Tube Stacker Chutes No. 1 and No. 2 (one is new)**
Chute located in upper mine site stockpiles
- II.A.6 **Stoker Bin**
Bin located at lower mine site - 1,900 tons
- II.A.7 **Rock Bin**
Bin located at lower mine site - 400 tons
- II.A.8 **Three Coal Silos**
ROM Silo located at upper mine site - 8,000 tons
Silo No. 1 located at lower mine site - 15,000 tons
Silo No.2 located at lower mine site - 15,000 tons

- II.A.9 **Conveyors**
Various Transport Conveyors including a new conveyor extension for the new Tube Stacker Chute

- II.A.10 **Three Load-out Stations**
Tipple Truck Load-out, upper mine site
Stoker Truck Load-out, lower mine site
Rail Load-out, lower mine site

- II.A.11 **Three Fabric Filter baghouses**
Day Model 72RF10 for ROM silo area
Day Model 72RF10 for ROM silo area
Day Model 72RF10 for crusher area

- II.A.12 **Two Fabric Filter Baghouses**
Dynaclone Model 6A for storage silos

- II.A.13 **One Fabric Filter Baghouse**
Dynaclone Model 7A for rail load-out

- II.A.14 **Fifteen (15) Space Heaters**
Natural gas-fired heaters at various locations

- II.A.15 **Two Boilers**
Natural gas-fired boilers manufactured by Kewanee Boiler Corp. and model number L3W-125-G. They are each rated at 5 MMBtu for main shop building heat.

II.B Requirements and Limitations

II.B.1 Requirements and Limitations

II.B.1.a The owner/operator shall notify the Director in writing when the new equipment has been installed and is operational. To ensure proper credit when notifying the Director, send your correspondence to the Director, attn: Compliance Section.

If the owner/operator has not notified the Director in writing within 18 months from the date of this AO on the status of the construction and/or installation, the Director shall require documentation of the continuous construction and/or installation of the operation. If a continuous program of construction and/or installation is not proceeding, the Director may revoke the AO. [R307-401-18]

II.B.1.b Coal shall be transferred only by enclosed conveyor. Inter-site truck haulage between the upper mine site and lower mine site may be used only during conveyor emergency periods. The direct offsite shipments by truck of coal and waste material combined total shall not exceed 8,000,000 tons per rolling 12-month period. The direct offsite shipments by truck of coal from each individual load-out shall not exceed 4,500,000 tons per rolling 12-month period. [R307-401-8]

II.B.1.b.1 Compliance with the limitations shall be determined on a rolling 12-month total. The owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records shall be kept for all periods when the plant is in operation. Records, including rolling 12-month totals, shall be made available to the Director or Director's representative upon request and the records shall include the two-year period prior to the date of the request. The records of shipments shall be determined by supervisor monitoring and maintenance of an operations log. The records shall be kept on a monthly basis. [R307-401-8]

- II.B.1.c Conveyor transfer points shall contain flaps on entry and discharge ends. [R307-401-8]
- II.B.1.d The upper elevation silo (8,000 ton capacity) shall be controlled by two baghouses, Day Model 72RF10 or equivalent. The baghouses shall be operated when the coal being transported is dry (less than 4% moisture) or whenever opacity readings exceed 20%. [R307-401-8]
- II.B.1.e All crushing and screening operations shall be enclosed, vented and controlled by one baghouse, Day Model 72RF10 or equivalent. Baghouses shall be operated when the coal being worked is dry (less than 4% moisture) or whenever opacity reading exceed 7%. [R307-401-8]
- II.B.1.f The two lower elevation silos, rated at 15,000 ton capacity each, shall be controlled by two baghouses, Dynaclone Model 6A or equivalent. The baghouses shall be operated when the coal being transported is dry (less than 4% moisture) or whenever opacity readings exceed 20%. [R307-401-8]
- II.B.1.g The Headhouse (rail load out) shall be controlled by one baghouse, Dynaclone Model 7A or equivalent. Storage at train loadout facilities shall be enclosed with venting to fabric filter baghouses. The baghouse shall be operated when the coal being transported is dry (less than 4% moisture) or whenever opacity readings exceed 20%. [R307-401-8]
- II.B.1.h Visible emissions from the following emission points shall not exceed the following values:
- A. All conveyor transfer points - 20% opacity
 - B. Conveyor drop points - 20% opacity
 - C. All other points - 20% opacity
- Opacity observations of emissions from stationary sources shall be conducted in accordance with 40 CFR 60, Appendix A, Method 9. [R307-401-8]
- II.B.1.i Visible emissions from haul road traffic and mobile equipment shall not exceed 20% opacity. Visible emissions determinations for traffic sources shall use procedures similar to Method 9, but the requirement for observations to be made at 15-second intervals over a six-minute period shall not apply. Six points, distributed along the length of the haul road, shall be chosen by the director or his/her representative. An opacity reading shall be made at each point when a vehicle passes the selected points. Opacity readings shall be made no less than one half vehicle length behind the vehicle and no less than one half the height of the vehicle. The accumulated six readings shall be averaged for the compliance value. [R307-401-8]
- II.B.1.j The following production limits shall not be exceeded:
- A. 600,000 tons maximum capacity in the upper elevation stockpile
 - B. 8,000,000 tons maximum throughput from the upper elevation stockpile and lower elevation stockpile combined
 - C. 300 tons maximum capacity in the emergency storage pile
 - D. 500,000 tons maximum capacity in the lower elevation stockpile
 - E. 8,000,000 tons coal produced per rolling 12-month period. [R307-401-8]
- II.B.1.j.1 Compliance with the limitations shall be determined on a rolling 12-month total. The owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of production shall be kept for all periods when the

plant is in operation. Records of production including rolling 12-month totals, shall be made available to the Director or Director's representative upon request and the records shall include the two-year period prior to the date of the request. The records of production shall be determined by examination of company coal sales records and examination of company throughput records for the points in question. The records shall be kept on a monthly basis. [R307-401-8]

- II.B.1.k All unpaved roads and other unpaved operational areas that are used by mobile equipment shall be water sprayed and/or chemically treated to control fugitive dust. The application of water or chemical treatment shall be used. Treatment shall be of sufficient frequency and quantity to maintain the surface material in a damp/moist condition. Records of water treatment shall be kept for all periods when the plant is in operation. The records shall include the following items:
- A. Date of treatment
 - B. Number of treatments made, dilution ratio, and quantity
 - C. Rainfall received, if any, and approximate amount
 - D. Time of day treatments were made
- [R307-401-8]
- II.B.1.l The speed of vehicles on the haul roads shall not exceed 25 miles per hour. [R307-401-8]
- II.B.1.m The Eccles Canyon road (State Highway U-96) is paved, and the owner/operator shall clean all coal spills on the road immediately. There shall be no "track out" of fugitive dust from unpaved roads onto the paved haul roads. [R307-401-8]
- II.B.1.n Water sprays or chemical dust suppression sprays shall be installed at the following points (unless a baghouse controlling enclosed equipment is installed) to control fugitive emissions:
- A. All crushers
 - B. All screens
 - C. All conveyor transfer points
- The sprays shall operate whenever dry conditions warrant or as determined necessary by the Director. Water sprays are not required during freezing weather conditions. [R307-401-8]
- II.B.1.o The moisture content of the material shall be maintained at a value of no less than 4 percent of water by weight. The moisture content shall be tested, if directed by the Director, using the appropriate ASTM method. [R307-401-8]
- II.B.1.p The storage piles shall be watered to minimize generation of fugitive dusts as dry conditions warrant during recovery operations only or as determined necessary by the Director. [R307-401-8]
- II.B.1.q The coal fines content of the stored coal shall not exceed 5.1 percent by weight, and that of the haul roads and pile areas shall not exceed 10 percent by weight. The coal fines content shall be determined, if directed by the Director, using appropriate ASTM method. The coal fines content is defined as all material passing a #200 U. S. Standard Sieve. [R307-401-8]

- II.B.1.r The sulfur content of any fuel oil burned shall not exceed 15 ppm by weight as determined by ASTM Method D-4294-89 or approved equivalent. The sulfur content shall be tested, if directed by the Director. [R307-401-8]

Section III: APPLICABLE FEDERAL REQUIREMENTS

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

NSPS (Part 60), A: General Provisions
NSPS (Part 60), Y: Standards of Performance for Coal Preparation and Processing Plants
Title V (Part 70) Area Source

PERMIT HISTORY

This AO is based on the following documents:

Is Derived From	NOI dated January 23, 2015
Supersedes	AO DAQE-AN0092007-03 dated June 24, 2003
Incorporates	Additional Information dated March 3, 2015

ADMINISTRATIVE CODING

The following information is for UDAQ internal classification use only:

Carbon County
CDS SM
NSPS (Part 60), Title V (Part 70) Area Source, Attainment Area,

ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by EPA to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent - 40 CFR Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal UDAQ use
EPA	Environmental Protection Agency
FDCCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - 40 CFR 52.21 (b)(49)(i)
GWP	Global Warming Potential - 40 CFR Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/HR	Pounds per hour
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO _x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM ₁₀	Particulate matter less than 10 microns in size
PM _{2.5}	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO ₂	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds