

west virginia department of environmental protection

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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:

G10-D100E

Plant ID No.:

039-00550

Applicant:

Coyote Coal Company LLC

Facility Name:

Blue Creek Prep Plant

Location:

Tad, Kanawha County, WV

SIC Codes:

1222 (Bituminous Coal & Lignite - Underground) 212112 (Bituminous Coal Underground Mining)

NAICS Codes: Application Type:

Modification

Received Date:

October 22, 2014

Engineer Assigned:

Dan Roberts

Fee Amount:

\$1,500

Date Received:

October 23, 2014

Complete Date:

November 21, 2014 Applicant's Ad Date: November 7, 2014

Newspaper:

The Daily Mail and Charleston Gazette

UTM Coordinates:

Easting: 459.9260 km

Northing: 4244.5023 km

Zone: 17

Lat/Lon Coordinates: Latitude: 38.347778

Longitude: -81.458611

NAD83

Description:

Modification to add raw coal stacker BC-14 and clean coal reclaim belt conveyor BC-15. Also, this application will include the emissions from transfer points TP-07, TP-08 and TP-09 which were previously listed in the input section of the emission calculation spreadsheet, but for an unknown

reason were not tallied on the transfer point emission summary page.

BACKGROUND

Coyote Coal Company LLC owns and/or operates the existing Blue Creek Prep Plant facility under current permit G10-D100D, which was approved on February 18, 2011. Coyote Coal Company LLC is a subsidiary of Patriot Coal. The property is owned by Blue Eagle Land, LLC, who

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leases it to Robin Land, who subleases to Coyote Coal Company LLC.

This facility also has another general permit registration G40-B035 approved on November 14, 2008 for portable 400 TPH rock crushing and screening system to be used during the construction process of the preparation plant and for haulroad maintenance. Coyote Coal Company LLC's wet wash preparation plant (G10-D100E) and the rock crushing and screening system (G40-B035) meet the definition of "Building, Structure, Facility, or Installation" in 45CSR14.2.10 and "Major Source" in 45CSR30.2.26 and shall be considered as one facility for determining applicability to 45CSR14 (PSD) and 45CSR30 (Title V).

DESCRIPTION OF PROCESS

The Blue Creek Preparation Plant is located in a remote hill-top area of Five Mile Branch off Campbell's Creek in Kanawha County, WV.

Raw coal will be delivered by truck to the raw coal open stockpile area OS-02(SW-WS) @ TP-01(UL-MDH) from area deep mines.

Coal from the two deep mines will transfer to raw coal stockpile OS-01(SW-WS) and OS-05(SW-WS) via belt conveyors BC-01(PE), BC-02(PE),BC-03(PE) and stacker BC-12(PE) @ TP-02(TC-FE) thru TP-06(TC-FE) and TP-28(TC-MDH). Future expansion will allow coal from OS-01 and OS-05 to reclaim underpile @ TP-07(LO-UC) onto belt BC-04(PE); then to radial stacker belt BC-14(PE) @ TP-08(TC-FE) for transfer to OS-02(SW-WS) @ TP-39(TC-MDH). Coal is then reclaimed @ TP-09(LO-UC) to belt BC-05(PE) and transferred to the crusher/screening building for processing thru SS-01(FW) and CR-01(FW) @ TP-10(TC-FE) thru TP-12(TC-FW), then belt BC-06(PE) takes the coal to the plant @ TP-13(TC-WW). A McClanahan crusher will receive approximately 5% of screen thruput size 7+ for processing and discharge back to the belt system – screen SS-01 will feed CR-02(FW) @ TP-30(TC-FE) and the crusher will discharge at TP-31(TC-FE).

Plant cleaned coal is transferred to the clean coal stockpile area via belts BC-07(PE), BC-08(PE) and BC-09(PE) @ TP-14(TC-WW) thru TP-17(TC-MDH). Clean coal will reclaim underpile from stockpile OS-03(SW-WS) to belt conveyor BC-15(PE) @ TP-18(LO-UC); then to BC-10(PE) @ TP-40(TC-FE) before transferring to a 1000 ton remote controlled truck load out bin BS-01(FE) @ TP-19(TC-FE). Clean coal will be transferred from BS-01 to truck for delivery @ TP-20(LO-MDH).

Refuse will transfer from the plant to belt conveyor BC-11(PE) @ TP-21(TC-WW) and sent to either the refuse bin BS-02(FE) @ TP-22(TC-FE) for load out to truck @ TP-23(LO-MDH) and delivery to the refuse disposal area @ TP-24(UL-MDH) or discharge into refuse stockpile OS-04(SW-WS) @ TP-25(TC-MDH) where the material can also be loaded by front-end loader to truck for delivery @ TP-26(LO-MDH) and TP-27(UL-MDH).

NOVEMBER 2010 MODIFICATION

Coyote Coal proposes to take material from open stockpiles OS-01 and OS-05 and create open stockpile OS-06(SW-WS) @ TP-29(LO-MDH). Coal from stockpile OS-06 will then be transferred by truck to a new raw coal stockpile area identified as OS-07(SW-WS) @ TP32(UL-MDH) and transferred to OS-02 @ TP-33(UL-MDH). This will necessitate handling the coal several times and over-calculating material in the transfer points, however, Blue Creek is expanding the refuse area and must store excess raw coal until the plant can process it.

MODIFICATION JANUARY 2011

Coyote Coal Company proposes to construct a refuse filter press building to be located adjacent to the preparation plant facility. Slurry refuse will be sent to the filter press building @ TP-34(TC-FE); to a newly constructed 72" belt conveyor BC-13(PE) @ TP-35(TC-FE); to a 100T refuse bin BS-03(FE) @ TP-36(TC-FE) and finally to truck for delivery to the disposal area @ TP-37(LO-MDH) and TP-38(UL-MDH).

MODIFICATION OCTOBER 2014

Future expansion will allow coal from OS-01 and OS-05 to reclaim underpile @ TP-07(LO-UC) onto belt BC-04(PE); then to radial stacker belt BC-14(PE) @ TP-08(TC-FE) for transfer to OS-02(SW-WS) @ TP-39(TC-MDH).

Clean coal will reclaim underpile from stockpile OS-03(SW-WS) to belt conveyor BC-15(PE) @ TP-18(LO-UC); then to BC-10(PE) @ TP-40(TC-FE) before transferring to a 1000 ton remote controlled truck load out bin BS-01(FE) @ TP-19(TC-FE).

The facility shall be modified and operated in accordance with the following equipment and control device information taken from registration applications G10-D100E, G10-D100D, G10-D100C, G10-D100B, G10-C100A and G10-C100 and any amendments thereto:

Equip- ment	Date of Construction,	G10-D		Maximum Capacity		Control	Associat	ed Transf	er Points
ID No.	Reconstruction or Modification ¹	Applicable Sections ²	Description	ТРН	ТРҮ	Equip- ment ³	Location: B -Before A -After	ID. No.	Control Equip-ment
Deep Mined Raw Coal Circuits									
BC-01	C 2008 ⁴	5 and 7	Belt Conveyor - receives raw coal from Blue Creek #2 Mine and transfers it to BC-02	3,500	10,950,000	PE	B A	TP-02 TP-03	TC-FE TC-FE
BC-02	C 2008 ⁴	5 and 7	Stacker Belt Conveyor - receives raw coal from BC-01and transfers it to OS-05	3,500	10,950,000	PE	B A	TP-03 TP-04	TC-FE TC-MDH
OS-05	C 2010	5 and 8	Raw Coal Stockpile - maximum 50,000 tons capacity, 88,869 ft ² base area and 75' height - receives raw coal from BC-02, stores it and then an endloader loads it to trucks for transport to OS-06 or OS-02 (see below)	3,500	10,950,000	ws	B A	TP-04 TP-29	TC-MDH LO-MDH
OS-06	C 2010	5 and 8	Raw Coal Stockpile - maximum 150,000 tons capacity, 288,869 ft ² base area and 60' height - receives raw coal from OS-01 and OS-05, stores it and then an endloader loads it to trucks for transport to OS-07		10,950,000	ws	B A	TP-29 TP-32	LO-MDH UL-MDH

Equip-	Date of Construction,	G10-D		Maximu	m Capacity	Control	Associat	ed Transf	er Points
ment ID No.	Reconstruction or Modification ¹	Applicable Sections ²	Description	ТРН	ТРҮ	Equip- ment ³	Location: B -Before A -After	ID. No.	Control Equip-ment
OS-07	C 2010	5 and 8	Raw Coal Stockpile - maximum 300,000 tons capacity, 688,869 ft ² base area and 60' height - receives raw coal from OS-06, stores it and then an endloader loads it to trucks for transport to OS-02 (see below)		10,950,000	ws	B A	TP-32 TP-33	UL-MDH UL-MDH
BC-03	C 2008 4	5 and 7	Belt Conveyor - receives raw coal from Blue Creek #1 Mine and transfers it to BC-12	3,500	10,950,000	PE	B A	TP-05 TP-06	TC-FE TC-FE
BC-12	C 2010	5 and 8	Radial Stacker Belt Conveyor - receives raw coal from BC-03 and transfers it onto OS-01	3,500	10,950,000	PE	B A	TP-06 TP-28	TC-FE TC-MDH
OS-01	M 2008 C 2008 ⁴	5 and 7	Raw Coal Stockpile - maximum 50,000 tons capacity, 88,869 ft ² base area and 75' height - receives raw coal from BC-12, stores it and then an endloader loads it to trucks for transport to OS-06 or underpile feeders place it onto BC-04	3,500	10,950,000	ws	B A A	TP-28 TP-29 TP-07	TC-MDH LO-MDH LO-UC
BC-04	Not Yet Constructed *	5 and 8	Belt Conveyor - receives raw coal from OS- 01 via underpile feeders and transfers it to BC-14 (* Permitted in 2008, but not yet constructed as of November 2014)	3,500	10,950,000	PE	B A	TP-07 TP-08	LO-UC TC-FE
BC-14	C 2014	5 and 8	Belt Conveyor - receives raw coal from BC- 04 and transfers it onto OS-02	3,500	10,950,000	PE	B A	TP-08 TP-39	TC-FE TC-MDH
OS-02	C 2008 ⁴	5 and 7	Raw Coal Stockpile - maximum 100,000 tons capacity, 188,869 ft ² base area and 75' height - receives raw coal delivered by trucks from outside sources, trucks transferring it from OS-07 and BC-14, stores it and then underpile reclaim feeders drop it onto BC-05	3,500 in 1,250 out	110 950 000	ws	B B A	TP-01 TP-39 TP-09	UL-MDH TC-MDH LO-UC
BC-05	C 2008 ²	5 and 7	Belt Conveyor - receives raw coal from OS- 02 via underpile reclaim feeders and transfers it to SS-01	1,250	10,950,000	PE	B A	TP-09 TP-10	LO-UC TC-FE
SS-01	C 2008 ⁴	5 and 7	Double Deck Screen - receives raw coal from BC-05, sizes it to 4"x0 and then transfers sized raw coal to CR-01 and 7"+ oversize coal from SS-01 (approx. 5%) to CR-02	1,250	10,950,000	FW	B A A	TP-10 TP-11 TP-30	TC-FE TC-FW TC-FE
CR-01	C 2008 ⁴	5 and 7	MMD Sizer - receives sized raw coal from SS-01, crushes it to 6"x0 and then drops it onto BC-06	1,250	10,950,000	FW	B A	TP-11 TP-12	TC-FW TC-FW
CR-02	C 2010	5 and 8	McClanahan Double Roll Crusher - receives 7"+ oversize coal from SS-01 (approx. 5%), crushes it and then drops it onto BC-06	800	547,500	FW	B A	TP-30 TP-31	TC-FE TC-FE
BC-06	C 2008 ⁴	5 and 7	Belt Conveyor - receives crushed raw coal from CR-01 and CR-02 and transfers it into the prep plant	1,250	10,950,000	PE	B B A	TP-12 TP-31 TP-13	TC-FW TC-FE TC-WW
			Prep Plant Clean Coal	Circuit					•
BC-07	C 2008 ⁴	5 and 7	Belt Conveyor - receives sized (2"x0) clean coal from prep plant and transfers it to BC-08	1,000	8,760,000	PE	B A	TP-14 TP-15	TC-WW TC-FE
BC-08	C 2008 ⁴	5 and 7	Belt Conveyor - receives sized (2"x0) clean coal from BC-07 and transfers it to BC-09	1,000	8,760,000	PE	B A	TP-15 TP-16	TC-FE TC-FE
BC-09	C 2008 ⁴	5 and 7	Belt Conveyor - receives sized (2"x0) clean coal from BC-08 and transfer it to OS-03	1,000	8,760,000	PE	B A	TP-16 TP-17	TC-FE TC-MDH
OS-03	C 2008 ⁴	5 and 7	Clean Coal Stockpile - maximum 100,000 tons capacity, 188,869 ft² base area and 75' height - receives sized (2"x0) clean coal from BC-09, stores it and then underpile reclaim feeders drop it onto BC-15	1,000 in 1,200 out	8,760,000	ws	B A	TP-17 TP-18	TC-MDH LO-UC

Equip-	Date of Construction,	G10-D		Maximu	m Capacity	Control	Associat	ed Transf	er Points
ID No.	Reconstruction or Modification 1	Applicable Sections ¹	Description	ТРН	ТРУ	Equip- ment ³	Location: B-Before A-After	ID. No.	Control Equip-ment
BC-15	C 2014	5 and 8	Belt Conveyor - receives sized (2"x0) clean coal from OS-03 and transfers it to BC-10	1,200	8,760,000	PE	B A	TP-18 TP-40	LO-UC TC-FE
BC-10	C 2008 4	5 and 7	Belt Conveyor - receives sized (2"x0) clean coal from BC-15 and transfers it to BS-01	1,200	8,760,000	PE	B A	TP-40 TP-19	TC-FE TC-FE
BS-01	C 2008 ⁴	5 and 7	Clean Coal Truck Loadout Bin - 1,000 ton capacity - receives sized (2"x0) clean coal from BC-10, stores it temporarily and then loads it to trucks for shipment		8,760,000	FE	B A	TP-19 TP-20	TC-FE LO-MDH
			Prep Plant Refuse Cir	rcuit					
BC-11	C 2008 ⁴	5 and 7	Belt Conveyor - receives refuse from prep plant and transfers it to OS-04 or BS-02	600	5,256,000	PE	B A A	TP-21 TP-22 TP-25	TC-WW TC-FE TC-MDH
BS-02	C 2008 ⁴	5 and 7	Refuse Truck Loadout Bin - 400 ton capacity - receives refuse from BC-11, stores it temporarily and then loads it to trucks for delivery to the refuse disposal area		5,256,000	FE	B A A	TP-22 TP-23 TP-27	TC-FE LO-MDH UL-MDH
OS-04	C 2008 ⁴	5 and 7	Refuse Stockpile - maximum 10,000 tons capacity, 18,869 ft² base area and 45' height - receives refuse from BC-11, stores it and then a front-end loader transfers it to trucks for delivery to the refuse disposal area	600	5,256,000	ws	B A A	TP-25 TP-26 TP-27	TC-MDH LO-MDH UL-MDH
BC-13	C 2011	5 and 8	72" Belt Conveyor - receives refuse material prep plant to the Filter Press building and transfers it to BS-03	100	876,000	PE	B B A	TP-34 TP-35 TP-36	TC-FE TC-FE TC-FE
BS-03	C 2011	5 and 8	Refuse Bin - 100 ton capacity - receives refuse material from BC-13, stores it temporarily and then it is loaded to truck via fixed chute for delivery to the disposal area		876,000	FE	B A A	TP-36 TP-37 TP-38	TC-FE LO-MDH UL-MDH

In accordance with 40 CFR 60 Subpart Y, coal processing and conveying equipment, coal storage systems, and coal transfer and loading systems constructed, reconstructed, or modified on or before April 28, 2008 shall not discharge gases which exhibit 20 percent opacity or greater. Coal processing and conveying equipment, coal storage systems, and coal transfer and loading systems constructed, reconstructed, or modified after April 28, 2008 shall not discharge gases which exhibit 10 percent opacity or greater. For open storage piles constructed, reconstructed, or modified after May 27, 2009, the permittee shall prepare and operate in accordance with a fugitive coal dust emissions control plan that is appropriate for site conditions.

² All registered affected facilities under Class II General Permit G10-D are subject to Sections 1.0, 1.1, 2.0, 3.0 and 4.0.

These pieces of equipment and open storage piles commenced construction after April 28, 2008.

<u>DESCRIPTION OF FUGITIVE EMISSIONS</u> (taken directly from the application)

Potential sources of fugitive particulate emissions for this facility include emissions, which are not captured by pollution control equipment and emissions from open stockpiles and vehicular traffic on approximately 3 miles unpaved haulroads and unpaved work areas. The haulroads and work areas will be controlled by water truck in accordance with section E.6.c.i. of the General Permit.

The water truck is equipped with pumps sufficient to maintain haulroads and work areas. The water truck will be operated three times daily, and more as needed in dry periods.

Control Device Abbreviations: FE - Full Enclosure; FW - Full Enclosure with Water Sprays; PE - Partial Enclosure; PW - Partial Enclosure with Water Sprays; WS - Water Sprays; WW - wet wash circuit; TC - Telescopic Chute; UC - Under-pile Conveyor (full enclosure); MDH - Minimize Drop Height; and N - No Control.

An additive to prevent freezing will be utilized in the winter months when freezing conditions are present.

SITE INSPECTION

Mike Kolb of the DAQ's Compliance and Enforcement Section performed a scheduled full on-site targeted inspection on May 30, 2012. At the time of the inspection, the facility was found to be in compliance and was given a status code of 30 - In Compliance.

Directions from Charleston, WV are to take U.S. Route 60 East, turn left onto County Route 73 (Campbells Creek Drive) and travel approximately 5.63 miles just beyond the mouth of Five Mile Branch Road, turn left across the bridge to enter the mine property, stay on this haulroad and travel 1.5 miles and turn right to go to the top of the mountain and travel 0.5 miles to the plant site.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Fugitive emission calculations for continuous and batch drop operations, transfer points, crushing and screening, storage piles, and paved and unpaved haulroads are based on AP-42 Fifth Edition "Compilation of Air Pollution Emission Factors", Volume 1. Control efficiencies were applied based on "Calculation of Particulate Matter Emission - Coal Preparation Plants and Material Handling Operations." The emission factors for crushing/breaking and screening operations were obtained from the Air Pollution Engineering Manual - Air & Waste Management Association - June 1992. The calculations were performed by the applicant's consultant using the DAQ's G10-C Excel Emission Calculation Spreadsheet and were checked for accuracy and completeness by the writer. The applicant's consultant subtracted the current permitted emissions totals from the proposed emission totals to get the increase in emissions. The increase in emissions calculations were performed by the writer using the DAQ's G10-C Excel Emission Calculation Spreadsheet and a copy has been attached.

The proposed modification will result in an increase in the facility's potential to discharge controlled particulate matter emissions of 6.92 pounds per hour (PPH) and 13.13 tons per year (TPY) of particulate matter (PM), of which 3.27 PPH and 6.21 TPY will be particulate matter less than 10 microns in diameter (PM₁₀). Refer to the following table for a complete summary of the proposed facility's potential to discharge:

- Proposed Increase in Emissions - Coyote Coal Company LLC		rolled nissions	Controlled PM ₁₀ Emissions				
Blue Creek Prep Plant - G10-D100E	lb/hour	TPY	lb/hour	TPY			
		Fugitive Emissions					
Open Storage Pile Emissions	0.00	0.00	0.00	0.00			
Unpaved Haulroad Emissions	0.00	0.00	0.00	0.00			
Paved Haulroad Emissions	0.00	0.00	0.00	0.00			
Fugitive Emissions Total	0.00	0.00	0.00	0.00			
		Point Sour	ce Emissions				
Equipment Emissions	0.00	0.00	0.00	0.00			
Transfer Point Emissions	6.92	13.13	3.27	6.21			
Point Source Emissions Total (PTE)	6.92	13.13	3.27	6.21			
INCREASE IN EMISSIONS	6.92	13.13	3.27	6.21			

The proposed modification will result in a new potential to discharge controlled particulate matter emissions of 567.03 PPH and 2,443.29 TPY of particulate matter (PM), of which 170.64 PPH and 728.36 TPY will be particulate matter less than 10 microns in diameter (PM $_{10}$). Refer to the following table for a complete summary of the facility's proposed potential to discharge:

- New Plant Emissions Total - Coyote Coal Company LLC		trolled missions	Controlled PM ₁₀ Emissions			
Blue Creek Prep Plant - G10-D100E	lb/hour	TPY	lb/hour	TPY		
		Fugitive Emissions				
Open Storage Pile Emissions	2.34	10.24	1.10	4.81		
Unpaved Haulroad Emissions	529.93	2,321.21	153.15	670.85		
Paved Haulroad Emissions	0.00	0.00	0.00	0.00		
Fugitive Emissions Total	532.27	2,331.45	154.25	675.66		
		Point Source	e Emissions			
Equipment Emissions	16.60	66.25	7.80	31.14		
Transfer Point Emissions	18.16	45.59	8.59	21.56		
Point Source Emissions Total (PTE)	34.76	111.84	16.39	52.70		
FACILITY EMISSIONS TOTAL	567.03	2,443.29	170.64	728.36		

Coyote Coal Company LLC's existing rock crushing and screening system (G40-B035) has the potential to discharge controlled particulate matter emissions of 52.76 PPH and 231.10 TPY of particulate matter (PM), of which 11.31 PPH and 49.52 TPY will be particulate matter less than 10 microns in diameter (PM $_{10}$). Refer to the following table for a complete summary of the proposed facility's potential to discharge:

- Plant Emissions Total - Coyote Coal Company LLC		rolled nissions	Controlled PM ₁₀ Emissions	
Rock Crushing and Screening System - G40-B035	lb/hour	TPY	lb/hour	TPY
		Fugitive l	Emissions	
Open Storage Pile Emissions	0.04	0.16	0.02	0.08
Unpaved Haulroad Emissions	50.16	219.72	10.07	44.11
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	50.20	219.88	10.09	44.18
		Point Sour	ce Emissions	
Equipment Emissions	2.55	11.16	1.21	5.31
Transfer Point Emissions	0.01	0.05	0.01	0.03
Point Source Emissions Total (PTE)	2.56	11.21	1.22	5.34
FACILITY EMISSIONS TOTAL	52.76	231.10	11.31	49.52

Coyote Coal Company LLC's facility will consist of the wet wash preparation plant (G10-D100E) and the rock crushing and screening system (G40-B035). A summary of the calculated emissions from the existing permitted operations and the proposed modifications are shown in the following summary:

- Facility-wide Emissions Summary -	Controlled - PM Emissions		Controlled PM ₁₀ Emissions	
	lb/hour	TPY	lb/hour	TPY
		Fugitive	Emissions	
G10-D100E - Wet Wash Prep Plant	532.27	2,331.45	154.25	675.66
G40-B035 - Rock Crushing/Screening	50.20	219.88	10.09	44.18
Fugitive Emissions Total	582.47	2,551.33	164.34	719.84
		Point Source	e Emissions	
G10-D100E - Wet Wash Prep Plant	34.76	111.84	16.39	52.70
G40-B035 - Rock Crushing/Screening	2.56	11.21	1.22	5.34
Point Source Emissions Total	37.32	123.05	17.61	58.04
FACILITY-WIDE EMISSIONS	619.79	2,674.38	181.95	777.88

Coyote Coal Company LLC's wet wash preparation plant (G10-D100E) and the rock crushing and screening system (G40-B035) meet the definition of "Building, Structure, Facility, or Installation" in 45CSR14.2.10 and "Major Source" in 45CSR30.2.26 and shall be considered as one facility for determining applicability to 45CSR14 (PSD) and 45CSR30 (Title V). Therefore, Coyote Coal Company LLC's wet wash preparation plant and the rock crushing and screening system shall be combined when determining applicability. The operations will have a combined estimated potential to discharge controlled emissions of 2,674.38 TPY of particulate matter, of which 777.88 TPY will

be particulate matter less than ten (10) microns in diameter. The facilities will have a combined estimated potential to emit (point source emissions only) of 123.05 TPY of particulate matter, of which 58.04 TPY will be particulate matter less than ten (10) microns in diameter.

REGULATORY APPLICABILITY

NESHAPS and PSD have no applicability to the modified facility. The proposed modification of Coyote Coal Company LLC's existing wet wash coal preparation plant is subject to the following state and federal rules:

45CSR5 To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations and Coal Refuse Disposal Areas

The facility is subject to the requirements of 45CSR5 because it meets the definition of "Coal Preparation Plant" found in subsection 45CSR5.2.4. The facility should be in compliance with Section 3 (less than 20% opacity) and Section 6 (fugitive dust control system and dust control of the premises and access roads) when the particulate matter control methods and devices proposed are in operation.

45CSR13 Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits, and Procedures for Evaluation

The proposed modification is subject to the requirements of 45CSR13 because it will result in an increase in emissions greater than six (6) pounds per hour and ten (10) tons per year of a regulated pollutant (PM and PM₁₀) and involve the construction of two (2) belt conveyors, which are defined as affected facilities in 40 CFR 60 Subpart Y. The applicant has submitted an application for a registration to modify. The applicant published a Class I legal advertisement in *The Daily Mail* and *Charleston Gazette* on November 7, 2014 and submitted the \$500 application fee and \$1,000 application fee.

45CSR16 Standards of Performance for New Stationary Sources 40 CFR 60 Subpart Y: Standards of Performance for Coal Preparation and Processing Plants

This facility is subject to 40 CFR 60 Subpart Y because it was constructed and modified after October 24, 1974 and processes more than 200 tons of coal per day. The proposed modification includes the construction of two (2) belt conveyors, which are defined as affected facilities in 40 CFR 60 Subpart Y. Therefore, the proposed modification is subject to 45CSR16, which incorporates by reference 40 CFR 60 Subpart Y - Standards of Performance for Coal Preparation Plants. The facility should be in compliance with Section 254(a) (less than 20% opacity for coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal which was constructed, reconstructed or modified on or before April 28, 2008) and Section 254(b) (less than 10% opacity for coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal which was constructed, re-constructed or modified after April

28, 2008) when the particulate matter control methods and devices proposed are in operation.

The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions. The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile. The plan must be submitted to the Director prior to startup of the new, reconstructed or modified open storage pile.

45CSR30 Requirements for Operating Permits

In accordance with 45CSR30 Major Source Determination, the facility is *not* listed in 45CSR30 subsection 2.26.b as one of the categories of stationary sources which must include fugitive emissions (coal open storage piles constructed or modified on or before May 27, 2009 and haulroads) when determining whether it is a major stationary source for the purposes of § 302(j) of the Clean Air Act. The facility's potential to emit will be 62.85 TPY for PM₁₀ (coal open storage piles constructed or modified after May 27, 2009 and point sources combined), which is less than the 45CSR30 threshold of 100 TPY of a regulated air pollutant used to define a major stationary source. Therefore, the facility remains a nonmajor source subject to 45CSR30. The facility is not subject to the permitting requirements of 45CSR30 and is classified as a deferred source.

The proposed modification of Coyote Coal Company LLC's wet wash coal preparation plant is <u>not</u> subject to the following state and federal rules:

45CSR14 Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration

In accordance with 45CSR14 Major Source Determination, the facility is *not* one of the 100 TPY stationary sources listed under the definition of "Major Stationary Source" in subsection 2.43.a. Therefore, it must have the potential to emit 250 TPY or more of any regulated pollutant to meet the definition of a major source in subsection 2.43.b. At the end of subsection 2.4.3, this facility is not listed in Table 1 - Source Categories Which Must Include Fugitive Emissions. So, fugitive emissions (from coal open storage piles constructed or modified on or before May 27, 2009 and haulroads) are not included when determining major stationary source applicability. The facility's potential to emit will be 133.29 TPY for PM (coal open storage piles constructed or modified after May 27, 2009 and point sources combined), which is less than the 45CSR14 threshold of 250 TPY for a regulated air pollutant used to define a major stationary source. Therefore, the proposed modification is not subject to the requirements set forth within 45CSR14.

45CSR19 Requirements for Pre-Construction Review, Determination of Emission Offsets for Proposed New or Modified Stationary Sources of Air Pollutants and Emission Trading for Intrasource Pollutants

This existing facility is located in Kanawha County, WV, which currently is designated as a $PM_{2.5}$ nonattainment area (for both the annual and the 2006 24-hr standards), but is in attainment for all other regulated pollutants. In accordance with Subsection 2.35.e, this facility is not a listed facility which must include fugitive emissions when determining if it is a major stationary source. This modified facility will remain a minor source with a potential to emit of less than 100 TPY for all regulated air pollutants (PM_{10}). Therefore, the proposed construction does not trigger Major Non-Attainment NSR Review.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

A toxicity analysis was not performed because the primary pollutants that will be emitted from this facility are PM (particulate matter) and PM_{10} (particulate matter less than 10 microns in diameter), which are non-toxic pollutants.

AIR QUALITY IMPACT ANALYSIS

Air dispersion modeling was not performed due to the size and location of this facility and the extent of the proposed modification. This facility is located in Kanawha County, WV, which is currently designated a $PM_{2.5}$ nonattainment area (for both the annual and the 2006 24-hr standards), but is in attainment for all other regulated pollutants. This modified facility will remain a minor source as defined by 45CSR14 and 45CSR19, therefore, an air quality impact analysis is not required.

GENERAL PERMIT ELIGIBILITY

The proposed modification of this facility meets the applicability criteria (Section 2.3), siting criteria (Section 3.1) and limitations and standards (Section 5.1) as specified in General Permit G10-D.

All registered facilities under Class II General Permit G10-D are subject to Sections 1.0, 1.1, 2.0, 3.0 and 4.0.

MONITORING OF OPERATIONS

The coal processing and conveying equipment and storage areas should be observed to make sure that the facility is meeting the applicable visible emission standards of 40 CFR 60, Subpart Y. Visible emissions from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, re-constructed or modified on or before April 28, 2008 shall not exceed 20 percent (20%) opacity as stated in 40 CFR 60.254(a). Visible emissions from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, re-constructed or modified after April 28, 2008 shall not exceed 10 percent (10%) opacity as stated in 40 CFR 60.254(b). Equipment used in the loading, unloading,

and conveying operations of open storage piles are not subject to the maximum 10% opacity limitation.

The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions. The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile. The plan must be submitted to the Director prior to startup of the new, reconstructed or modified open storage pile.

RECOMMENDATION TO DIRECTOR

The information contained in this modification application indicates that compliance with all applicable regulations should be achieved when all of the proposed particulate matter control methods are in operation. Due to the location, nature of the process, and control methods proposed, adverse impacts on the surrounding area should be minimized. No comments were received during the comment period. Therefore, the granting of a General Permit G10-D registration to Coyote Coal Company LLC for the modification of their existing wet wash coal preparation plant located near Tad, Kanawha County, WV is hereby recommended.

Daniel P. Roberts, Engineer Trainee
NSR Permitting Section

November 21, 2014

Date

Increase in Emissions

EMISSIONS SUMMARY

Name of applicant:

Coyote Coal Co, LLC

Name of plant:

Blue Creek - G10-D100E

Particulate Matter or PM (for 45CSR14 Major Source Determination)

	Uncontrolled PM		Uncontrolled PM Controlled				Controlled P			
	lb/hr	TPY	lb/hr	TPY						
	FUGITIV	E EMISSIONS								
Stockpile Emissions	0.00	0.00	0.00	0.00						
Unpaved Haulroad Emissions	0.00	0.00	0.00	0.00						
Paved Haulroad Emissions	0.00	0.00	0.00	0.00						
Fugitive Emissions Total	0.00	0.00	0.00	0.00						

Point Source Emissions Total*	11.79	20.03	7.28	13.13
Transfer Point Emissions	11.79	20.03	7.28	13.13
Equipment Emissions	0.00	0.00	0.00	0.00

Facility Emissions Total	11.79	20.03	7.28	13.13
	·			

*Facility Potential to Emit (PTE) (Baseli	e Emissions) =	13.13
(Based on Point Source Total controlled PM TPY emissions from above	ENTER ON LINE 26 O	F APPLICATION

Particulate Matter under 10 microns, or PM-10 (for 45CSR30 Major Source Determination)

	Uncontrolled PM-10		Contro	lled PM-10
	lb/hr	lb/hr TPY lb/hr		TPY
Stadenila Emissiona	FUGITIN	/E EMISSIONS	0.00	0.00
Stockpile Emissions Unpaved Haulroad Emissions	0.00	0.00	0.00	0.00
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	0.00	0.00	0.00	0.00

POINT SOURCE EMISSIONS					
Equipment Emissions	0.00	0.00	0.00	0.00	
Transfer Point Emissions	5.58	9.47	3.44	6.21	
Point Source Emissions Total*	5.58	9.47	3.44	6.21	

Facility Emissions Total	5 58	9.47	3 44	621
Facility Emissions Total	5.50	3.71	9.77	<u> </u>

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Include all information for each emission source and transfer point as listed in the permit application.

Name of applicant: Name of plant: Coyote Coal Co, LLC
Blue Creek - G10-D100E

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Mod 11-14

1. CRUSHING AND SCREENING (including all primary and secondary crushers and screens)

1a. PRIMARY CRUSHING

Primary Crusher ID Number	Description	Maximum Material Processing Capacity IPH IPY		Control Device ID Number	Control Efficiency %

1D. SECUNDARY AND TERTIARY CRUSHING

Secondary & lertiary	Description	Maximum Material Processing Capacity		Control Device	Control Efficiency
Crusher ID		IPH	IPY	ID Number	%
 1			l I	1	
			 		
			 		
			<u> </u>		
			 		
	-				
			<u> </u>		

1c. SUREENING

Secondary & Lertiary	Description		ım Material ing Capacity	Control Device	Control Efficiency
Crusher ID		TPH	IPY	ID Number	%
				_	
				+	
				+	
				+	

2. TRANSFER POINTS (including all conveyor transfer points, equipment transfer points etc.) PM PM-10

k = Particle Size Multiplier (dimensionless) 0.74 0.35
U = Mean Wind Speed (mph) 7

Transfer Point Description Material Maximum Include ID Numbers of all conveyors, ID No. crushers, screens, stockpiles, etc. involved Content % TPH TPY OLD TRANFER POINTS	Control Device ID Number	Control Efficiency %
ID No. crushers, screens, stockpiles, etc. involved Content % TPH TPY	-1	
OLD TRANFER POINTS		
OLD TRANFER POINTS		
OLD TRANFER POINTS	1	
TP-08 BC-04 to OS-02	TC-MDH	0
17-00 BC-04 to US-02	I C-IVIDI1	ا ٽ
TP-17 BC-09 to OC-03 7 (1,000) (8,760,000)	TC-MDH	80
TP-18 OS-03 to BC-10 7 (1,200) (8,760,000)	LO-UC	80
7 (1,200) (8,700,000)	10-00	
TP-28 BC-12 to OS-01 6 (3,500) (10,950,000)	LO-UC	80
MODIFIED TRANSFER POINTS		
TP-08 BC-04 to BC-14	TC-FE	80
TP-17 BC-09 to OS-03 7 1,000 8,760,000	TC-MDH	0
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
TP-18 OS-03 to BC-15 7 1,200 8,760,000	LO-UC	80
TP-28 BC-12 to OS-01 6 3,500 10,950,000	TC-MDH	0
NEW TRANSFER POINTS		
NEW INMOFER FOINTS		
TP-39 BC-14 to OS-02 6 3,500 10,950,000	TC-MDH	0
TP-40 BC-15 to BC-10 7 1,200 8,760,000	TC-FE	80
17-40 BC-13 to BC-10 7 1,200 8,700,000	10-12	-00
TRANSFER POINTS IN INPUTS BUT NOT TALLIED IN EMISSIONS TOTAL		
OR TRANSFER POINTS PREVIOUSL		
TP-07 OS-01 to BC-04 6 3,500 10,950,000 TP-08 BC-04 to BC-14 6 3,500 10,950,000	LO-UC TC-FE	80 80
TP-09 OS-02 TO BC-05 6 3,500 10,950,000	LO-UC	80
		<u></u>
		-
		
		

3.	WIND EROSION OF STOCKPILES	(including all stockpiles of raw coal, clean coal, coal refuse, etc.)	

		ordarr oddir, od
p =	number of days per year with precipitation >0.01 inch	157
f≔	percentage of time that the unobstructed wind speed	20
	exceeds 12 mph at the mean pile height	

Source	Stockpile	Sitt	Stockpile	Control	Control
ID No.	Description	Content of	base area	Device	Efficiency
		Material %	Max. sqft	iD Number	_%
				T	
	·			-	
				1	_
	· · · · · · · · · · · · · · · · · · ·			 	
				 	
		+		 	

4. UNPAVED HAULROADS (including all equipment traffic involved in process, haul trucks, endloaders, etc.)

s =	silt content of road surface material (%)	9
p =	number of days per year with precipitation >0.01 inch	157
M _{dry} =	surface material moisture content (%) - dry conditions	0.2

item Number	Description	Number of wheels	Mean Vehicle Weight(tons)	Mean Vehicle Speed (mph)	Miles per Trip	Maximum Trips Per Hour	Maximum Trips Per Year	Control Device ID Number	Control Efficiency %
1									
2			_						
3									
4									
5									
6									
7				_					
8									

5. INDUSTRIAL PAVED HAULROADS (including all equipment traffic involved in process, haul trucks, endloaders, etc.)

sL =	road surface silt loading, (g/ft^2)	11
P=	number of days per year with precipitation >0.01 inch	157

ltern Number	Description	Mean Vehicle Weight (tons)	Miles per Trip	Maximum Trips Per Hour	Maximum Trips Per Year	Control Device ID Number	Control Efficiency %
1 2					1	Ĺ	
3 4							
<u>5</u>							
7 8							