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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:	G10-D169 After-the-Fact
Plant ID No.:	047-00109
Applicant:	Mid-Vol Coal Sales, Inc.
Facility Name:	No. 8 Loadout
Location:	Elbert, McDowell County, WV
SIC Codes:	1221 (Bituminous Coal & Lignite - Surface)
NAICS Codes:	212111 (Bituminous Coal and Lignite Surface Mining)
Application Type:	Modification
Received Date:	April 1, 2015
Engineer Assigned:	Dan Roberts
Fee Amount:	$1,500
Date Received:	April 6, 2015
Applicant's Ad Date:	April 8, 2015
Newspaper:	*The Industrial News*
Complete Date:	February 10, 2017
UTM Coordinates:	Easting: 452.680 km • Northing: 4132.00 km • NAD83 Zone 17N
Lat/Lon Coordinates:	Latitude: 37.333469 • Longitude: -81.534168 • NAD83
Description:	After-the-Fact modification to add truck dump bin E3-1, conveyor BC1 and stockpile OS-1, which were constructed sometime before January 1, 2009 and remove the Black Wolf Washer wet wash coal preparation plant.

BACKGROUND

Mid-Vol Coal Sales, Inc. is currently operating their existing No. 8 Loadout under permit R13-2553D which was approved on January 22, 2008. This facility previously was permitted for the construction and operation of a wet wash coal preparation plant (Black Wolf Washer) and railcar loadout. The wet wash coal preparation plant has been dismantled and the equipment has been removed, but the shell of the building remains. With this application, the company wishes to convert

to a General Permit G10-D registration.

The company had a previous general permit registration G10-B062 which was approved on September 4, 2003 for a nearby site under the same facility ID number for the Murphy Branch Breaker. According to Derrick Kegley, Manager of Engineering, the Murphy Branch Breaker was removed.

When asked to list all current 45CSR13 permit numbers in Item 10A of the application, "G10-D" was listed. This application was initially assigned as G10-D062A, but it should have been assigned a new G10-D series because it is a modification of permit R13-2553D and conversion to a G10-D General Permit registration. Therefore, on February 16, 2017, this application was reassigned as G10-D169.

As stated by Derrick Kegley, Manager of Engineering, in a letter dated November 14, 2015, "Mid-Vol Coal Sales, Inc.'s parent company purchased the loadout in late 2008. There have been no changes since this time, but the permit on file does not match what is in the field. The date the changes were made, or if the approved permit was ever accurate is unknown. The main change I could see was the addition of a truck dump. The 01/01/09 date was added, because I'm confident the changes occurred before that date. Anything before that date, I couldn't find company personnel who knew anything about it." The facility was previously owned and permitted by Black Wolf Mining Company.

This No. 8 Loadout facility was previously owned and operated by Black Wolf Mining Company. In a letter dated January 13, 2015, Black Wolf Mining Company submitted a cover letter and paperwork to document a change of ownership and transfer current permit R13-2553D to Mid-Vol Coal Sales, Inc. The letter stated "we are in the process of transferring our permits out of Black Wolf Mining Company in hopes of dissolving the company in the future." Both companies are subisidaries of ArcelorMittal Coal Group USA, LLC.

DESCRIPTION OF PROCESS (taken directly from the application)

Coal is dumped by truck into truck dump bin (E3-1) and stockpiles (OS-2, OS-3 and OS-4). The coal dumped into (E3-1) is transported thru (BC1) and into (OS-1). (OS-2, OS-3 and OS-4 are then loaded by front end loader into the underground feeder which feed it onto conveyor BC2. The coal then travels down (BC2) and dumps into bin (E3-2) along with the coal loaded out of stockpile (OS-1). From bin (E-3-2) coal travels down belt (BC3). Belt (BC3) then drops on belt (BS4). Belt (BC4) then dumps into bin (BS-1). The rail cars are then loaded out of bin (BS-1).

The facility shall be modified and operated in accordance with the following equipment and control device information taken from registration application G10-D169 and any amendments thereto:

Equipment ID No.	Date of Construction, Reconstruction or Modification [1]	G10-D Applicable Sections [2]	Description	Maximum Capacity		Control Device [3]	Associated Transfer Points		
				TPH	TPY		Location: B -Before A -After	ID. No.	Control Device [3]
Railcar Loadout Circuit									
E3-1	C 2009	5	Clean Coal Dump Bin - 60 tons capacity - receives clean coal from trucks and feeds it into BC1	450	500,000	PW	B A	TP01 TP05	UD-PW TC-FE
BC1	C 2009	5	Belt Conveyor - receives clean coal from E3-1 and transfers it to OS-1	450	500,000	N	B A	TP05 TP06	TC-FE TC-N
OS-1	C 2009	5	Clean Coal Stockpile with a Stacking Tube - maximum 15,000 tons capacity, 25,000 ft^2 base area and 40' height - receives clean coal from BC1, stores it and then it is reclaimed by a front endloader to E3-2 (see below)	450	500,000	WS	B A A	TP06 TP10 TP11	TC-N LO-N UD-PW
OS-2	C 2009	5	Clean Coal Stockpile with a Stacking Tube - maximum 15,000 tons capacity, 25,000 ft^2 base area and 40' height - receives clean coal from trucks, stores it and then it is reclaimed by a front endloader to OT-1	450	500,000	WS	B A A	TP02 TP07 TP12	UL- N LO-N UD-N
OS-3	C 2009	5	Clean Coal Stockpile with a Stacking Tube - maximum 15,000 tons capacity, 25,000 ft^2 base area and 40' height - receives clean coal from trucks, stores it and then it is reclaimed by a front endloader to OT-1	450	500,000	WS	B A A	TP03 TP08 TP13	UL-N LO-N UD-N
OS-4	C 2009	5	Clean Coal Stockpile with a Stacking Tube - maximum 15,000 tons capacity, 25,000 ft^2 base area and 40' height - receives clean coal from trucks, stores it and then it is reclaimed by a front endloader to OT-1	450	500,000	WS	B A A	TP04 TP09 TP14	UL-N LO-N UD- N
Underground Feeder	C 2009	5	Clean Coal Dump Bin - 60 tons capacity - receives clean coal from OS-2, OS-3 and OS-4 via a front endloader and feeds it onto BC2	450	500,000	PE	B B B A	TP12 TP13 TP14 TP15	UD-N UD-N UD-N TC-FE
BC2	C 2009	5	Belt Conveyor - receives clean coal from OT-1 and transfers it to E3-2	450	500,000	N	B A	TP15 TP16	TC-FE TC-PW
E3-2	C 2009	5	Clean Coal Dump Bin - 60 tons capacity - receives clean coal from BC2 and OS-1 via a front endloader and feeds it onto BC3	450	500,000	PW	B B A	TP11 TP16 TP17	UD-PW TC-PW TC-FE
BC3	C 2009	5	Belt Conveyor - receives clean coal from E3-2 and transfers it to BC4	450	500,000	N	B A	TP17 TP18	TC-FE TC-PW
BC4	C 2009	5	Belt Conveyor - receives clean coal from BC3 and transfers it to BS-1	450	500,000	N	B A	TP18 TP19	TC-PW TC-FE
BS-1	C 2009	5	Weigh Bin - 60 tons capacity - receives clean coal from BC4 and loads it into railcars through a telescopic chute for shipment	450	500,000	FE	B A	TP19 TP20	TC-FE LR-TC

1 In accordance with 45CSR5, visible emissions from any stack or fugitive dust control system shall not exceed twenty percent (20%) opacity or greater.

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.

3 Control Device Abbreviations: FE - Full Enclosure; FW - Full Enclosure with Water Sprays; PE - Partial Enclosure; PW - Partial Enclosure with Water Sprays; WS - Water Sprays; TC - Telescopic Chute; and N - No Control.

DESCRIPTION OF FUGITIVE EMISSIONS (taken directly from the application)

Open Coal Stockpiles - All stockpiles are now controlled by the use of compaction by the equipment on site (a dozer and the endloaders) that thus far has provided sufficient control. A water truck traverses through the stockpile area locations during normal watering of the haulroads which

also helps to control fugitive coal dust from loading and unloading activities at the piles.

Haulroads - Fugitive coal dust on the haulroads are now controlled by the use of a water truck that has thus far provided sufficient control.

Other Structures - The other structures are partially or fully enclosed and have provided sufficient control thus far.

SITE INSPECTION

On August 27, 2014, Fred Teel of the DAQ's Compliance and Enforcement Section performed a scheduled full on-site targeted inspection. Mr. Teel's notes were as follows: "At the time of the inspection the loadout wa not in operation. According to Derrick Kegley, the environmental contact, the wet wash plant was built to attrack the current owner and has not been used since the initial test period. I received and reviewed the tonnage throughput records for the loadout (attached). The facility's highest hourly rate was 408 tph and the permitted limit is 600 tph. The facility's highest 12 month average was 251,206 tpy and the permitted limit is 750,000 tpy. Both are well below the permitted limits. As evidenced by the throughput records, the facility is shipping very little coal at this time and the company has laid off some employees at the facility. No violations were noted." The facility was found to be in operation and in compliance and was given a status code of 30 - In Compliance.

Directions from Charleston, WV are to take I-64 East/I-77 South towards Beckley and travel 52.4 miles, take Exit 42 and merge onto WV-16 South/Robert C Byrd Drive towards WV-97/Sophia/Mullens and travel 3.7 miles, take the ramp towards Mullens and travel 0.4 miles, keep right at the fork in the ramp and travel 0.4 miles, turn slight right onto Lester Highway/WV-54 and continue to follow WV-54 for 13.4 miles, turn right onto WV-97 and travel 5.4 miles, turn right to stay on WV-97 and travel 6.7 miles, turn slight left onto WV-10/WV-97/Main Ave. and travel 0.3 miles, take the first left onto River Road/WV-10 and travel 0.8 miles, turn right onto WV-16 and travel 17.3 miles, turn left onto McDowell Street/WV-16 and continue to follow WV-16 for 1.7 miles, stay straight to go onto Riverside Drive/WV-103 and travel 3.9 miles, turn slight right onto Riverside Drive/WV-103 and continue to follow WV-103 for 1.4 miles, turn right onto Church Street and travel 0.3 miles, turn right onto County Highway-13/Coney Island-Filbert Number 9 Road and travel approximately 2.5 miles, turn left onto County Highway-13/3 and travel approximately 0.25 miles to the site on the right.

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 facility-wide emissions 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 proposed modification will result in a new potential to discharge controlled particulate matter emissions of 44.44 pounds per hour (lb/hour) and 33.92 tons per year (TPY) of particulate matter (PM), of which 14.19 lb/hour and 10.72 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 Emissions Total - **Mid-Vol Coal Sales, Inc. No. 8 Loadout - G10-D169**	**Controlled PM Emissions**		**Controlled PM_{10} Emissions**	
	lb/hour	TPY	lb/hour	TPY
		Fugitive Emissions		
Open Storage Pile Emissions	0.16	0.70	0.08	0.33
Unpaved Haulroad Emissions	38.40	29.95	11.33	8.84
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	*38.56*	*30.66*	*11.41*	*9.17*
		Point Source Emissions		
Equipment Emissions	0.00	0.00	0.0	0.00
Transfer Point Emissions	5.88	3.27	2.78	1.54
Point Source Emissions Total (PTE)	*5.88*	*3.27*	*2.78*	*1.54*
FACILITY EMISSIONS TOTAL	**44.44**	**33.92**	**14.19**	**10.72**

REGULATORY APPLICABILITY

NESHAPS and PSD have no applicability to the modified facility. The proposed modification of Mid-Vol Coal Sales, Inc.'s existing coal handling operation 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 "Handling Operation" found in subsection 45CSR5.2.14. 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 involve

the after-the-fact construction of one (1) truck dump bin, one (1) conveyor and one (1) open storage pile. The applicant has submitted an application for a registration to modify. The applicant published a Class I legal advertisement in *The Industrial News* on April 8, 2015 and submitted the $500 application fee.

45CSR22: Air Quality Management Fee Program

The facility is now subject to the requirements of 45CSR22 and shall pay all fees according to the application fee schedule and Certificate to Operate fee schedule. In accordance with Section 4 of 45CSR22, the permittee must pay the appropriate annual fees required to maintain their Certificate to Operate.

The proposed modification of Mid-Vol Coal Sales, Inc.'s existing coal handling operation 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 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 3.27 TPY for PM (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.

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 *no longer* subject to 40 CFR 60 Subpart Y. The proposed modification includes the removal of the Black Wolf Washer wet wash coal preparation plant and the facility will no longer prepare coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying. Therefore, the proposed modified facility is *no longer* subject to 45CSR16, which incorporates by reference 40 CFR 60 Subpart Y - Standards of Performance for Coal Preparation Plants.

<u>TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS</u>

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 McDowell County, WV, which is currently in attainment for PM (particulate matter) and PM_{10} (particulate matter less than 10 microns in diameter). 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 45CSR5. Visible emissions from any stack or fugitive dust control system shall not exceed 20 percent (20%) opacity or greater.

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 Mid-Vol Coal Sales, Inc. for the modification of their existing coal handling operation located near Elbert, McDowell County, WV is hereby recommended.

Daniel P. Roberts

Daniel P. Roberts, Engineer Trainee
NSR Permitting Section

February 16, 2017
Date