



3/22/17

**west virginia department of environmental protection**

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**ENGINEERING EVALUATION / FACT SHEET**

**BACKGROUND INFORMATION**

Application No.: R13-0119D  
Plant ID No.: 001-00005  
Applicant: Wolf Run Mining Company  
Facility Name: Sentinel Preparation Plant  
Location: Philippi, Barbour County  
SIC Code: 1221 (Bituminous Coal & Lignite - Surface)  
NAICS Code: 212111 (Bituminous Coal and Lignite Surface Mining)  
Application Type: Modification  
Received Date: August 17, 2016  
Engineer Assigned: Dan Roberts  
Fee Amount: \$2,000  
Date Received: August 18, 2016  
Applicant Ad Date: August 17, 2016  
Newspaper: *The Barbour Democrat*  
Complete Date: February 10, 2017  
UTM Coordinates: Easting: 581.2 km Northing: 4339.2 km NAD83 Zone 17N  
Lat/Lon Coordinates: Latitude: 39.198267 Longitude: -80.059645 NAD83  
Description: Modification to do the following: add radial stacking belt conveyor BC-20; add clean coal belt conveyor BC-21 and open storage pile OS-08 to be fed by the new belt plow on existing belt conveyor BC-6; declare refuse belt conveyors BC-10 and BC-11 inactive; remove refuse belt conveyor BC-12; relocate refuse belt conveyor BC-13 and open storage pile OS-3 to the clean coal conveying system to be fed by the new belt plow on existing belt conveyor BC-6 (if BC-13 and OS-3 are not relocated, then they will be removed from the facility); and increase the size of the existing open storage piles OS-1 through OS-7.

**BACKGROUND**

Wolf Run Mining Company is currently operating their existing Sentinel Preparation Plant under permit R13-0119C, which was approved on February 7, 2012. Wolf Run Mining Company is a subsidiary corporation of Alpha Natural Resources.

Anker West Virginia was originally issued a construction permit for the Sentinel Preparation

Plant on November 6, 1974. Wolf Run Mining Company acquired the facility in 1991.

On September 21, 2009, Wolf Run Mining Company was issued modification permit R13-0119A to construct new belt lines, transfer points, an open stockpile and a paved and unpaved haulroad.

On July 19, 2011, Wolf Run Mining Company was issued modification permit R13-0119B to increase the throughput of raw coal from 1,500,000 TPY to 3,200,000 TPY, clean coal from 1,500,000 TPY to 3,200,000 TPY, and refuse from 825,000 TPY to 1,760,000 TPY.

On July 19, 2011, Wolf Run Mining Company was issued modification permit R13-0119C to do the following: construct a new raw coal receiving and processing area which will consist of one crusher (CR-2), two belt conveyors (BD-15 and BC-16) and three open storage piles (OS-4, OS-5 and OS-6); construct a clean coal handling system consisting of two belt conveyors (BC-12 and BC-17), radial stacker (BC-18) and one open storage pile (OS-7); add a transfer point (TP-47) from existing refuse bin BS-2 directly to trucks for transport to the refuse disposal area; increase the maximum annual throughput of the wet wash prep plant from 3,200,000 TPY to 4,400,000 TPY; and increase the maximum annual throughput of the refuse circuit.

On August 10, 2016, Wolf Run Mining Company submitted application R13-0119D to the DAQ. This application proposes to modify the facility through the following actions: add radial stacking belt conveyor BC-20; add clean coal belt conveyor BC-21 and open storage pile OS-08 to be fed by the new belt plow on existing belt conveyor BC-6; declare refuse belt conveyors BC-10 and BC-11 inactive; remove refuse belt conveyor BC-12; relocate refuse belt conveyor BC-13 and open storage pile OS-3 to the clean coal conveying system to be fed by the new belt plow on existing belt conveyor BC-6; and increase the size of the existing open storage piles OS-1 through OS-7.

## PROCESS DESCRIPTION

Raw coal exits the mine on 54" belt conveyor BC-01. The raw coal travels on BC-1 to double roll crusher CR-1 and then into double deck screen S-1. The coal is then transferred to 54" belt conveyor BC-2 and carried to double deck screen S-2 and then into another double deck screen S-3.

Sized coal leaving S-3 is transferred to 48" belt conveyor BC-3. BC-3 carries the sized coal to a stacking tube, which then transfers the coal to open storage pile OS-1. A dozer pushes the sized coal from OS-1 to an underground feeder. The sized coal will exit the underground feeder to 30" belt conveyor BC-4, which transfers it to the preparation plant.

Trucks transport raw coal into the facility and dump it to open storage pile OS-4. Loaders will transfer the raw coal from OS-4 to new double roll crusher CR-2. From CR-2, refuse greater than two (2) inches will exit onto new belt conveyor BC-15 which will transfer it to new open storage pile OS-5, where it is reclaimed by a loader and loaded to trucks and hauled to the refuse pile. Also from CR-2, sized raw coal will exit onto new belt conveyor BC-16 which will transfer it to new open storage pile OS-6, where it will be pushed by a dozer to the underground feeder at existing open storage pile OS-1 and transferred to the wet wash preparation plant on belt conveyor

BC-4.

Clean coal exits the preparation plant onto 36" belt conveyor BC-5 or belt conveyor BC-19. Belt conveyor BC-19 transfers middlings from the preparation plant to belt conveyor BC-17, to belt conveyor BC-18, to new radial stacker BC-20 and then onto open storage pile OS-7. From OS-7, a dozer will push the clean coal into an underground feeder which feeds it through a new tunnel and onto extended belt conveyor BC-7 (see below).

Belt conveyor BC-5 transfers clean coal from the preparation plant to 36" belt conveyor BC-6. Clean coal is carried by BC-6 to a stacking tube and into open storage pile OS-2, but a new belt plow can transfer it onto belt conveyor BC-13 or new radial stacker BC-21. A dozer pushes the clean coal from OS-2 to an underground feeder, which transfers it onto 60" belt conveyor BC-7. BC-7 then transfers it to railcar loadout bin BS-1. Clean coal is then transferred to railroad cars for delivery.

Belt conveyor BC-13 and open storage pile OS-3 were previously permitted as part of the refuse conveying system (see below for more details), but have been proposed to be moved to the clean coal conveying system or removed from the facility. Relocated belt conveyor BC-13 will receive clean coal from BC-6 via the new belt plow and transfer it through a new stacking tube onto relocated open storage pile OS-3. A dozer will reclaim the clean coal and push it into an underground feeder which feeds it onto existing belt conveyor BC-7 (see above).

New radial stacker BC-21 will receive clean coal from BC-6 via the new belt plow and transfer it onto new open storage pile OS-8. A front end loader will reclaim the clean coal and dump it into trucks for shipment over an unpaved haulroad.

Refuse from double deck screen S-3 drops onto 42" belt conveyor BC-9. BC-9 transfers the refuse to 36" belt conveyor BC-8. Refuse exiting the preparation plant will also enter onto BC-8. BC-8 will carry all refuse to transfer and loadout bin BS-2.

Refuse will exit bin BS-2 via three separate transfer points. Previously, approximately 300,000 tons per year could exit bin BS-2 onto 24" belt conveyor BC-10, then onto 24" belt conveyor BC-11 and then to another 24" belt conveyor BC-12. The refuse was then transferred to another 24" belt conveyor BC-13, which was attached to a radial stacker. Refuse would then drop onto open stockpile OS-3 and then be removed from OS-3 via a loader onto trucks. The trucks would exit the site using unpaved and paved access roads. With this permit, belt conveyors BC-10 and BC-11 have been declared inactive, belt conveyor BC-12 has been removed and belt conveyor BC-13 and open storage pile OS-3 have been proposed to be relocated to the clean coal conveying system and fed by the new belt plow on existing clean coal conveyor BC-6 (see above for more details). If BC-13 and OS-3 are not relocated as proposed, they will and be removed.

Refuse will exit bin BS-2 at transfer point TP-47 directly into trucks to be hauled to the refuse expansion or onto 36" belt conveyor BC-14. BC-14 will carry the refuse to loadout bin BS-3. Refuse will exit bin BS-3 to a pan and will then be spread onto the refuse disposal area.

The facility shall be constructed and operated in accordance with the following equipment and control device information taken from permit applications R13-0119D, R13-0119C, R13-0119B,

R13-0119A and R13-0119 and any amendments thereto:

Equip-ment ID No.	Date of Construction, Reconstruction or Modification <sup>1</sup>	Description	Maximum Capacity		Control Device <sup>2</sup>	Associated Transfer Points		
			TPH	TPY		Location: B -Before A -After	ID. No.	Control Device <sup>2</sup>
<b>Deep Mine Raw Coal Circuit</b>								
BC-1	M 2011	54" Raw Coal Belt Conveyor - receives raw coal from the deep mine and transfers it to CR-1	1,350	3,600,000	PE	B A	N/A TP-1	N/A FE
CR-1	M 2011 C 2008	McLanahan 30" x 60" Heavy Duty Double Roll Crusher - HDDR3060001 - receives raw coal from BC-1, crushes it and then drops it onto S-1	1,350	3,600,000	FE	B A	TP-1 TP-2	FE FE
S-1	M 2011 C 2008	2-8' x 16' Double Deck Incline Vibrating Screen - Serial No. 4701 - receives crushed raw coal from CR-1, classifies it and then drops it onto BC-2	1,350	3,600,000	FE	B A	TP-2 TP-3	FE FE
BC-2	M 2011	54" Raw Coal Belt Conveyor - receives sized raw coal from S-1 and transfers it onto S-2	1,350	3,600,000	PE	B A	TP-3 TP-4	FE FE
S-2	M 2011 C 2008	8' x 16' Double Deck Incline Vibrating Screen - Serial No. 4702 - receives sized raw coal from BC-2, classifies it and then drops it onto S-3	1,350	3,600,000	FE	B A	TP-4 TP-4A	FE FE
S-3	M 2011 C 2008	8' x 16' Double Deck Incline Vibrating Screen - Serial No. 4702 - receives sized raw coal from S-2, classifies it and then drops the pass through coal onto BC-3 and the oversize refuse onto BC-9 (see Refuse Circuit below)	1,350	3,600,000	FE	B A A	TP-4A TP-5 TP-19	FE FE FE
BC-3	M 2011	48" Raw Coal Belt Conveyor - receives sized raw coal from S-3 and transfers it onto OS-1	1,350	3,600,000	PE	B A	TP-5 TP-6	FE FE
OS-1	M 2016 M 2011	Raw Coal Open Storage Pile with a Stacking Tube - maximum 50,000 tons capacity, 37,500 ft <sup>2</sup> base area and 20' height - receives raw coal from BC-3 and OS-6 via a dozer (see Trucked Raw Coal Circuit below), stores it and then a dozer pushes it into an underground feeder which reclaims it to BC-4	1,350 in 600 out	4,400,000	WS	B B A A	TP-6 TP-42 TP-7 TP-8	FE N UC FE
BC-4	M 2016 M 2011	30" Raw Coal Belt Conveyor - receives sized raw coal from OS-1 and transfers it to the wet wash prep plant	600	4,400,000	PE	B A	TP-8 TP-9	FE FE
<b>Trucked Raw Coal Circuit</b>								
OS-4	M 2016 C 2011	Raw Coal Open Storage Pile - maximum 50,000 tons capacity, 37,500 ft <sup>2</sup> base area and 15' height - receives raw coal from trucks, stores it and then an endloader transfers it to CR-2	360	800,000	WS	B A A	TP-32 TP-33 TP-34	N N PE
CR-2	C 2011	Tesab Double Roll Crusher - 1012T 707 - receives raw coal from OS-4 via an endloader, crushes it and the oversize refuse drops onto BC-15 while the crushed raw coal drops onto BC-16	600	3,600,000	PE	B A A	TP-34 TP-35 TP-40	PE PE PE
BC-15	C 2011	Clean Coal Belt Conveyor - receives +2" oversize refuse from CR-2 and transfers it onto OS-5	360	400,000	PE	B A	TP-35 TP-36	PE N
OS-5	M 2016 C 2011	Oversize Refuse Open Storage Pile - maximum 50,000 tons capacity, 37,500 ft <sup>2</sup> base area and 15' height - receives oversize refuse from BC-15, stores it and then an endloader loads it to trucks which transport and dump it in the refuse disposal area	360	400,000	WS	B A A A	TP-36 TP-37 TP-38 TP-39	N N N N
BC-16	C 2011	Clean Coal Belt Conveyor - receives sized raw coal from CR-2 and transfers it onto OS-6	360	800,000	PE	B A	TP-40 TP-41	PE N
OS-6	M 2016 C 2011	Sized Raw Coal Open Storage Pile - maximum 50,000 tons capacity, 37,500 ft <sup>2</sup> base area and 15' height - receives sized raw coal from BC-16, stores it and then a dozer pushes it to the underground feeder at OS-1 (see Deep Mine Raw Coal Circuit above)	360	800,000	WS	B A	TP-41 TP-42	N N
<b>Clean Coal Circuit</b>								
BC-19	C 2011	Clean Coal Belt Conveyor - receives middlings clean coal from the wet wash prep plant and transfers it to BC-17	360	800,000	PE	B A	TP-43	PE
BC-17	C 2011	Clean Coal Belt Conveyor - receives middlings clean coal from BC-19 and transfers it to BC-18	360	800,000	PE	B A	TP-43 TP-44	PE PE

Equip- ment ID No.	Date of Construction, Reconstruction or Modification <sup>1</sup>	Description	Maximum Capacity		Control Device <sup>2</sup>	Associated Transfer Points		
			TPH	TPY		Location: B -Before A -After	ID. No.	Control Device <sup>2</sup>
BC-18	C 2011	Clean Coal Belt Conveyor - receives middlings clean coal from BC-17 and transfers it to BC-20	360	800,000	PE	B A	TP-44 TP-48	PE PE
BC-20	C 2016	Clean Coal Radial Stacker - receives middlings clean coal from BC-18 and transfers it onto OS-7	360	800,000	PE	B A	TP-48 TP-45	PE N
OS-7	M 2016 C 2011	Middlings Clean Coal Open Storage Pile - maximum 50,000 tons capacity, 37,500 ft <sup>2</sup> base area and 20' height - receives clean coal from BC-20, stores it and then a dozer pushes it into an underground feeder which reclaims it onto BC-7 (see below)	360	800,000	WS	B A	TP-48 TP-45	PE N
BC-5	M 2016 C 2011	36" Clean Coal Belt Conveyor - receives clean coal from the wet wash prep plant and transfers it onto BC-6	800	4,400,000	PE	B A	TP-10 TP-11	FE FE
BC-6	M 2011	36" Clean Coal Belt Conveyor - receives clean coal from BC-5 and transfers it onto BC-13 or BC-21 via a belt plow or through a stacking tube onto OS-2	800	3,600,000	PE	B A A	TP-11 TP-49 TP-12	FE PE FE
BC-13	M 2016 C 2008	Clean Coal Belt Conveyor - receives clean coal from BC-6 via a belt plow and transfers it onto OS-3	360	800,000	PE	B A	TP-49 TP-53	PE N
OS-3	M 2016 C 2008	Clean Coal Open Storage Pile with a Stacking Tube - maximum 62,500 tons capacity, 46,875 ft <sup>2</sup> base area and 20' height - receives clean coal from BC-13, stores it and then a dozer pushes it into an underground feeder which reclaims it onto BC-7	360	800,000	WS	B A	TP-53 TP-26	N N
BC-21	C 2016	Clean Coal Radial Stacker - receives clean coal from BC-6 via a belt plow and transfers it onto OS-8	360	800,000	PE	B A	TP-49 TP-50	PE PE
OS-8	C 2016	Clean Coal Open Storage Pile with a Stacking Tube - maximum 62,500 tons capacity, 46,875 ft <sup>2</sup> base area and 20' height - receives clean coal from BC-13, stores it and then an endloader loads it onto trucks for shipment	360	800,000	WS	B A A	TP-50 TP-51 TP-52	PE N N
OS-2	M 2016 M 2011	Clean Coal Open Storage Pile with a Stacking Tube - maximum 50,000 tons capacity, 37,500 ft <sup>2</sup> base area and 20' height - receives clean coal from BC-6, stores it and then a dozer pushes it into an underground feeder which reclaims it to BC-7	800 in 2,500 out	3,600,000	WS	B A A	TP-12 TP-13 TP-14	FE UC FE
BC-7	M 2011	60" Clean Coal Belt Conveyor - receives clean coal from OS-7, OS-3 and OS-2 and transfers it into BS-1	2,500	4,400,000	PE	B B B A	TP-46 TP-26 TP-14 TP-15	FE N FE FE
BS-1	M 2011	Clean Coal Loadout Bin with a Telescopic Chute - 161 tons capacity - receives clean coal from BC-7 and then loads it into rail cars	2,500	4,400,000	FE	B A	TP-15 TP-16	FE PE
<b>Refuse Circuit</b>								
BC-9	C 2008 <sup>3</sup>	42" Refuse Belt Conveyor - receives oversize refuse from S-3 (see Deep Mine Raw Coal Circuit above) and transfers it onto BC-8	244	300,000	PE	B A	TP-19 TP-20	FE PE
BC-8	M 2011	36" Refuse Belt Conveyor - receives oversize refuse from BC-9 and refuse from the wet wash prep plant and transfers it into BS-2	400	2,280,000	PE	B B A	TP-20 TP-17 TP-18	PE FE FE
BS-2	M 2011	Refuse Bin - 161 tons capacity - receives refuse from BC-8 and drops it onto BC-10, BC-14 or into trucks for transport to the disposal area	400	2,280,000	FE	B A A A	TP-18 TP-21 TP-28 TP-47	FE UC UC PE
BC-10	C 2008 <sup>3</sup>	24" Refuse Belt Conveyor - receives refuse from BS-2 and transfers it onto BC-11 (idled as of 2016)	244	300,000	PE	B A	TP-21 TP-22	UC PE
BC-11	C 2008 <sup>3</sup>	24" Refuse Belt Conveyor - receives refuse from BC-10 and previously transferred it onto BC-12 which was removed (idled as of 2016)	244	300,000	PE	B A	TP-22 TP-23	PE PE
BC-14	M 2011	36" Refuse Belt Conveyor - receives refuse from BS-2 and transfers it into BS-3	400	1,980,000	PE	B A	TP-28 TP-29	UC FE
BS-3	M 2011	Refuse Bin - 161 tons capacity - receives refuse from BC-14 and then drops it onto pans which transport and dump it to the disposal area	400	1,980,000	FE	B A A	TP-29 TP-30 TP-31	FE PE N

- <sup>1</sup> 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 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.
- <sup>2</sup> Control Device Abbreviations: FE - Full Enclosure; PE - Partial Enclosure; PW - Partial Enclosure with Water Sprays; WS - Water Sprays; and N - None.
- <sup>3</sup> This equipment was approved to be constructed under application R13-0119A, which was received on May 29, 2008 and approved on September 22, 2009. Therefore, it was constructed after April 28, 2008.

## SITE INSPECTION

Karl Dettinger of the DAQ's Compliance and Enforcement Section from the North Central Regional Office performed a full on-site inspection on June 26, 2015. Mr. Dettinger entered the following notes: "F.C.E. inspection was conducted on 6-26-15. No fugitive dust emissions were observed during inspection. Photos were taken to document this. Records were reviewed, and several very minor issues were discovered." The inspection summary status code assigned to this facility was 30 - In Compliance.

Directions from Charleston are to take Interstate I-79 North, take the WV-20 Exit 115 toward Stonewood/Nutter Fort and travel 0.3 miles, turn right onto State Route 20 South and travel 4.0 miles, State Route 20 becomes State Route 57 East and travel 11.9 miles, turn left onto US Route 119 North and travel 5.5 miles, turn slight left onto State Route 76 North (Galloway Rd.) and the facility is located 200 yards north of this intersection.

## 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 and were checked for accuracy and completeness by the writer.

The proposed modifications will result in changes in the potential to discharge controlled emissions from point sources of -14.55 pounds per hour (lb/hour) and +14.14 tons per year (TPY) of particulate matter (PM), of which -3.00 lb/hour and +7.76 TPY will be particulate matter less than 10 microns in diameter (PM<sub>10</sub>). The writer compared the permitted potential to discharge approved under permit R13-0119C and the new potential to discharge proposed within application R13-0119D to get the proposed change in emissions. Refer to the following table for a summary of the proposed changes in emissions:

<b>- Proposed Changes in Emissions - Wolf Run Mining Company R13-0119D</b>	<b>Controlled PM Emissions</b>		<b>Controlled PM<sub>10</sub> Emissions</b>	
	lb/hour	TPY	lb/hour	TPY
<b>Fugitive Emissions</b>				
Stockpile Emissions	+0.36	+1.56	+0.17	+0.73
Unpaved Haulroad Emissions	-12.72	+2.91	-3.76	+0.86
Paved Haulroad Emissions	-5.85	-5.85	-1.14	-1.14
<i>Fugitive Emissions Total</i>	<i>-18.21</i>	<i>-1.38</i>	<i>-4.72</i>	<i>+0.45</i>
<b>Point Source Emissions</b>				
Equipment Emissions	+2.40	+14.00	+1.13	+6.58
Transfer Point Emissions	+1.26	+1.52	+0.60	+0.72
<i>Point Source Emissions Total (PTE)</i>	<i>+3.66</i>	<i>+15.52</i>	<i>+1.73</i>	<i>+7.30</i>
<b>CHANGE IN EMISSIONS</b>	<b>-14.55</b>	<b>+14.14</b>	<b>-3.00</b>	<b>+7.76</b>

The proposed modification will result in the following new estimated facility-wide potential to discharge controlled emissions as summarized below:

<b>- New Facility-wide Emissions - Wolf Run Mining Company R13-0119D</b>	<b>Controlled PM Emissions</b>		<b>Controlled PM<sub>10</sub> Emissions</b>	
	lb/hour	TPY	lb/hour	TPY
<b>Fugitive Emissions</b>				
Open Storage Pile Emissions	0.54	2.35	0.25	1.10
Unpaved Haulroad Emissions	91.08	169.76	26.88	50.11
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
<i>Fugitive Emissions Total</i>	<i>91.62</i>	<i>172.11</i>	<i>27.14</i>	<i>51.21</i>
<b>Point Source Emissions</b>				
Equipment Emissions	92.40	133.20	43.43	62.60
Transfer Point Emissions	13.85	16.85	6.55	7.97
<i>Point Source Emissions Total (PTE)</i>	<i>106.25</i>	<i>150.05</i>	<i>49.98</i>	<i>70.57</i>
<b>FACILITY EMISSIONS TOTAL</b>	<b>197.87</b>	<b>322.16</b>	<b>77.12</b>	<b>121.79</b>

## REGULATORY APPLICABILITY

NESHAPS and PSD have no applicability to the facility. The proposed modification of Wolf Run Mining Company's existing wet wash coal preparation plant will be subject to the following state and federal rules:

45CSR5            *To Prevent and Control Air Pollution from the Operation of Coal Preparation Plants and Coal Handling Operations*

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 a decrease in controlled hourly emissions and an increase in controlled annual emissions greater than ten (10) tons per year of a regulated air pollutant (PM) and involve the construction of two (2) conveyors and one (1) open storage pile and modification of existing belt conveyors and open storage piles, which are subject to NSPS Subpart Y. The applicant has submitted an application for a modification permit. The applicant published a Class I legal advertisement in *The Barbour Democrat* on August 17, 2016 and submitted \$1,000 for the application fee and \$1,000 for the NSPS fee.

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

This existing wet wash coal preparation plant 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) conveyors and one (1) open storage pile and modification of existing belt conveyors and open storage piles, 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 systems, or coal transfer and loading systems processing coal constructed, re-constructed or modified on or before 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, this wet wash coal preparation



plant is not listed in 45CSR30 subsection 2.26.b as one of the categories of stationary sources which must include fugitive emissions (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 new potential to emit will be 71.67 TPY for PM<sub>10</sub> (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 will be subject to 45CSR30 and remain classified as a Title V deferred non-major source.

The proposed modification of Wolf Run Mining Company's existing wet wash coal preparation plant will not be 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, this wet wash coal preparation plant 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 new potential to emit will be 152.40 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.

### TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

A toxicity analysis was not performed because the pollutants that will be emitted from this facility are PM (particulate matter) and PM<sub>10</sub> (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 nature and extent of the modifications proposed for this existing facility. This facility is located in Barbour County, WV, which is currently in attainment for PM (particulate matter) and PM<sub>10</sub> (particulate matter less than 10 microns in diameter). This facility is not a major source as defined by 45CSR14, therefore, an air quality impact analysis is not required.

### MONITORING OF OPERATIONS

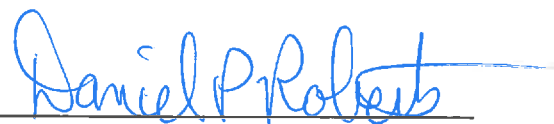
For the purposes of determining compliance, the applicant shall maintain certified daily and monthly records. An example form for tracking the annual amount of raw coal, clean coal and refuse throughput is included as Appendices A, B and C to Permit R13-0119D. An example form for tracking the amount of water applied through the pressurized water spray system is included as Appendix D to Permit R13-0119D. An example form for tracking the amount of water applied through the water truck is included as Appendix E to Permit R13-0119D. An example form for visible emission readings is included as Appendix F to Permit R13-0119D. The Certification Of Data Accuracy statement shall be completed within fifteen (15) days of the end of the reporting period. These records shall be maintained on site by the permittee for at least five (5) years and shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.

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 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 permit 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. Therefore, the granting of a permit to Wolf Run Mining Company for the modification of their existing Sentinel Preparation Plant located near Philippi, Barbour County, WV is hereby recommended.



Daniel P. Roberts, Engineer Trainee  
NSR Permitting Section

March 22, 2017

Date

Fact Sheet R13-0119D  
Wolf Run Mining Company  
Sentinel Preparation Plant