



west virginia department of environmental protection

Division of Air Quality
601 57th Street, SE
Charleston, WV 25304
Phone: (304) 926-0475 • Fax: (304) 926-0479

Earl Ray Tomblin, Governor
Randy C. Huffman, Cabinet Secretary
www.dep.wv.gov

ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.: G10-D031F **After-the-Fact**
Plant ID No.: 005-00016
Applicant: Rockwell Mining, LLC
Facility Name: Wells Preparation Plant
Location: Wharton, Boone County, WV
SIC Code: 1222 (Bituminous Coal & Lignite - Underground)
1221 (Bituminous Coal & Lignite - Surface)
NAICS Code: 212112 (Bituminous Coal Underground Mining)
212111 (Bituminous Coal and Lignite Surface Mining)
Application Type: Modification
Received Date: March 4, 2015
Engineer Assigned: Dan Roberts
Fee Amount: \$1,500
Date Received: March 12, 2015
Applicant's Ad Date: March 11, 2015; revised ad 8/12/15
Newspaper: *Coal Valley News*
Complete Date: December 29, 2015
UTM Coordinates: Easting: 440.4 km Northing: 4195.5 km NAD83 Zone 17
Lat/Lon Coordinates: Latitude: 37.905078 Longitude: -81.677959 NAD83
Description: After-the-Fact modification to add and delete equipment from this facility as follows: delete the Dakota Mine Circuit consisting of BC1, CR5, BS1 and BC2; delete the Lightfoot Mine No. 1 Circuit consisting of BC3 and BC10; delete the Lightfoot Mine No 3. Circuit consisting of BC9, BC35 and BC36; delete upper open storage pile area stockpile OS6; delete BC12, BC13 and CR3; add transfer points T20A, T20B, T20C, T20D, T20E, T20F, T20G, T20H and T20I, which are all located within the wet wash preparation plant building.

BACKGROUND

In correspondence dated November 15, 2015, a transfer of ownership was requested for all of the permits associated with the Wells Preparation Plant (facility ID No. 005-00016) from Eastern Associated Coal, LLC to Rockwell Mining, LLC. In a letter dated January 19, 2016, the DAQ acknowledged the requested transfer.

As a result of the transfer of ownership of the Wells Preparation Plant (G10-D031F, 005-00016) from Eastern Associated Coal, LLC to Rockwell Mining, LLC's, the Wells Preparation Plant and Rivers Edge Mining, LLC's Jarrells Branch Coal Handling Facility (G10-D057B, 005-00078) no longer meet the definition of "Building, Structure, Facility, or Installation" in 45CSR14.2.10 and "Major Source" in 45CSR30.2.26 because they are no longer under common ownership and control. Eastern Associated Coal, LLC and Rivers Edge Mining, LLC are both subsidiaries of Patriot Coal Corporation. Rockwell Mining, LLC is a subsidiary of Blackhawk Mining LLC. Therefore, Rockwell Mining, LLC's Wells Preparation Plant (G10-D031F) and Rivers Edge Mining, LLC's Jarrells Branch Coal Handling Facility (G10-D057B) shall no longer be combined when determining applicability to 45CSR14 (PSD) and 45CSR30 (Title V).

Rockwell Mining, LLC is currently operating their Wells Preparation Plant under General Permit registration G10-D031E approved on February 12, 2012.

DESCRIPTION OF PROCESS

Rockwell Mining, LLC has proposed the after-the-fact addition of clean coal conveyor BC-26A with maximum rated throughputs of 2,000 TPH and 5,950,000 TPY.

Raw Coal

Raw coal is brought to the facility by a series of previously existing raw coal mine belts including the Lightfoot No. 2 Belt BC4 (PE), CC-11 Mine Belt BC5 (PE), Black Stallion Belt BC37 (PE) and the Campbell Creek No. 10 (CC10) Belt BC43 (PE). Raw coal can also be brought to the facility by trucks dumping into the foreign coal truck dumps. Incoming raw coal is deposited into one of three raw coal silos BS4 (FE), BS5 (FE), 6,000-tons capacity each, and 5,000-tons capacity BS3 (FE) by a series of conveyors.

Campbell Creek No. 10 (CC10)

From Campbell Creek No. 10 (CC10), overland belt BC43 (PE) transfers raw coal to Black Stallion mine slope belt BC38 (PE) via T73 (PE).

Black Stallion Mine BC37 (PE)

From Black Stallion mine slope belt BC37 (PE) to BC38 (PE), via T66 (PE). From BC38 (PE) to open storage pile OS5 (MC) with 72' concrete stacking tube, via T67 (PE). Open Storage

Pile OS5 is reclaimed by underground feeders to belt BC39 (PE), via T68 (FE). From BC39 (PE) to BC40 (PE), via T69 (FE). From BC40 (PE) to BC41 (PE), via T70 (FE). From BC41 (PE) to BC42 (PE), via T71 (FE). From BC42 (PE) to BC7 (PE), via T72 (FE).

LightFoot No. 2 BC4 (PE)

From BC4 (PE) to BC8A (FE) via T3 (PE). From BC8A (FE) to BS4 (FE) via T8A (FE). From BC8 (FE) to BS5 (FE), via T7 (FE). From BS5 (FE) to BC14 (PE), via T12 (FE). From BC13 (PE) via T8 (FE) to BS4 (FE). From BS4 (FE) to BC14 (PE), via T13 (FE). From BC10 (FE) to BS4 (FE) or BC11 (PE), via T8 (FE). From BS4 (FE) to BC14 (PE) via T13 (FE). From BC11 (PE) to BS3 (FE), via T6 (FE). From BS3 (FE) to BC14 (PE), via T14 (FE). BC14 (PE) transfers the raw coal to the Double Deck Screen Area S1 (FE) via T15 (FE).

CC11 Mine and 50 Ton Foreign Coal Hopper BS2 (PW)

The Foreign Coal Hopper BS2 is fed by either the CC11 mine via BC5 (PE) or truck, via T4 (PW). From BS2 (PW) raw coal is sent to BC6 (PE) via T5 (FE). From BC6 (PE) raw coal transfers to BS3 (FE) or (PE) via T6 (FE). From BS3 (FE) raw coal is sent to BC14 (PE) via T14 (FE). From BC12 (PE) raw coal is sent to BS4 (FE) via T8 (FE). From BS4 (FE) raw coal is transferred to BC14 (PE) via T13 (FE).

In case of overloading, raw coal silos BS4 (FE) and BS5 (FE) can transfer coal through an enclosed chute to a 15,000 - tons capacity raw coal open storage pile OS4 (MC), via T9 (MD). This stockpiled raw coal is transferred by an endloader to feeder BS6 (PW) via T10 (PW), which then drops it to conveyor belt BC14 (PE), via T11 (PE) in order to reintroduce the coal into the preparation plant circuit.

Double Deck Scalping Screen Area S1 (FE)

Raw coal silos BS3 (FE), BS4 (FE), and BS5 (FE) deposit coal onto conveyor belt BC14 (PE), via T14 (FE), T13 (FE), and T12 (FE) respectively, for transfer to scalping screen S1 (FE). The 10' by 20' double deck "banana" scalping screen's top deck will transfer the oversize run-of-mine into the rotary breaker CR1 (FE) via T16 (FE), while the bottom deck of the screen will separate the fine raw coal. Fine raw coal transfers to conveyor BC15 (PE) via T17 (FE), to fine raw coal bypass conveyor BC18 (PE) via T19 (FE), or to the sized material conveyor BC16 (PE) via T19 (FE). Conveyor BC16 (PE) transfers sized material to the plant feed belt BC17 (PE) via T20 (FE). Sized coal from CR1 (FE) transfers to BC16 (PE) via T18 (FE). Conveyor BC16 (PE) then transfers the coal to BC17 (PE) via T20 (FE) which feeds the plant.

Cook Mountain Raw Coal

The Cook Mountain Lower Area raw coal open storage pile areas begins with Lower Open Storage Pile OS8 (MC). This open storage pile will store raw coal depending on current facility needs at that time. Coal will be brought to the open storage pile by trucks dumping to the ground at open storage pile OS8 via T56 (MC) and reclaimed by front endloaders back into two 100-ton

dump hoppers BS8 (PW) and BS9 (PW), or dumped there directly by trucks, via T55 (PW). Dump hoppers BS8 and BS9 feed Hammermill Crusher CR2 via TP57 (FE) and TP58 (FE), respectively, which sizes raw coal from as large as 24 inches to 2 inches. The crushed coal is transferred to a 1,500 TPH transfer conveyor BC23 (PE) via T59 (FE). Transfer conveyor BC23 transfers the coal to the tripper tower and then to clean coal silos BS10 and BS11 through pant leg chutes via T60 (FE). See Clean Coal below to continue the process description.

Clean Coal

The clean coal transfer conveyors BC19 (PE), BC20 (PE), BC21 (PE), and BC24 (PE) are rated at 1,550 TPH. The clean coal load-out conveyors BC26 (FE), BC26A (PE) and BC27 (FE) are rated at 2,000 TPH and 4,000 TPH, respectively, and the annual throughput for each of them is 6.0 MMTPY.

Clean or fine coal from conveyor BC-19 (PE), and/or Raw coal from Cook Mountain transfer conveyor BC23 (PE) is conveyed to either two (2) 5,000 tons capacity clean coal silos BS10 (FE) and BS11 (FE) or to two (2) 75,000 tons capacity clean coal open storage piles OS1 (MC) and OS2 (MC).

Clean and fine coal from the wet wash preparation plant is deposited onto conveyor BC19 (PE) and is transferred to BC20 (PE) via T22 (FE), then from BC20 (PE) to BS10 (FE) or BC21 (PE) via T23 (FE). Clean coal from BC21 (PE) is transferred to BC24 (PE) or BS11 (FE) via T24 (FE). Clean and direct ship coal reclaimed from the silos BS10 (FE) and BS11 (FE) is transferred to BC26 (FE) via T27 (FE) and T28 (FE), respectfully, then to BC26A (PE) via T29 (PE) and finally to BC27 (FE) via T29A (FE).

Clean coal from conveyor BC24 (PE) is transferred to open storage pile OS1 (MC) or conveyor BC25 (PE) via T25 (PE). From conveyor BC25 (PE), clean coal is transferred to open storage pile OS2 (MC) via T26 (PE). Open storage piles OS1 (MC) and OS2 (MC) are reclaimed to conveyor belt BC27 (FE) via T30 (FE) and T31 (FE), respectfully.

Conveyor BC27 (FE) transports the clean coal from conveyor BC-26A and open storage piles OS1 and OS2 to the 200-tons capacity train load-out bin BS12 (FE) via T33 (FE), where it is loaded to rail cars via a telescopic chute at T34 (LR-TC).

Portable Clean Coal Screening Unit

Clean coal can be transferred from clean coal open storage pile OS1 by a front endloader to a portable screening unit. The front endloader dumps clean coal to hopper H-1 (PW) via T1P (PE) which is stationed right above single deck screen PS-1 (PW) that has maximum throughput rates of 500 tons per hour (TPH) and 500,000 tons per year (TPY). The screen separates ± 2 inch material. The -2 inch material passes through the screen to belt conveyor BC-1P via T2P (FW), which transfers it to clean coal open storage pile OS2 via T3P (MC). The +2 inch material passes from the screen to belt conveyor BC-2P via T4P (FW), which transfers it back to clean coal open storage pile OS1 via T5P (MC).

Emergency Areas

The Wells facility's emergency raw/clean coal open storage piles is identified as the lower open storage pile OS5 (MC) area. This open storage pile area can store either raw or clean coal depending on current facility needs at that time. Coal will be brought to this open storage pile area during emergency operations by trucks traveling by unpaved haulroad and dumping to the ground via T47 (MC) and then it will be reclaimed by front endloaders back into trucks via T48 (MC).

Refuse

Oversized material scalped from screen S1 (FE) is transferred to rotary breaker CR1 (FE), via T16 (FE), for further separation of refuse. From CR1 (FE) material is transferred to conveyor BC28 (PE) via T35 (PE) and then to conveyor BC30 (PE) via T36 (PE). BC29 (PE) transfers refuse material separated from raw coal during the wet wash process to conveyor BC30 (PE) via T37 (PE). Conveyor BC30 (PE) transfers this refuse material along with the scalped rock from BC28 (PE) to BC31 (PE) or 300 ton refuse bin BS13 (FE) via T38 (FE). From BC31 (PE), refuse is transferred to BC32 (PE) via T40 (FE), then to BC33 (PE) or 1,000 ton refuse bin BS14 (FE) via T41 (FE). From BC33 (PE), refuse is transferred to BC34 (PE) or 500 ton refuse bin BS15 (FE) via T43 (FE). From BC34 (PE), refuse is transferred to refuse open storage pile OS3 (MC) via T45 (MC). All refuse bins BS13 (FE), BS14 (FE) and BS15 (FE) can load trucks directly through fixed chutes via T39 (PE), T42 (PE), and T44 (PE), respectfully, in order to transport refuse material by haulroad to the refuse disposal area. In addition, refuse material in OS3 (MC) is loaded into trucks by a front endloader via T46 (MC) for transport to the refuse area for disposal.

The facility shall be constructed and operated in accordance with the following equipment and control device information taken from registration applications G10-D031F, G10-D031E, G10-C031D, G10-C031DC, G10-C031B, G10-B031A and G10-B031 any amendments thereto:

Equipment ID #	Date of Construction, Reconstruction or Modification ¹	G10-D Applicable Sections ²	Emission Unit Description	Design Capacity		Control Device ³	Associated Transfer Points		
				TPH	TPY		Location: B -Before A -After	ID No.	Control Device ³
Campbell Creek No. 10 (CC10)									
BC43	C - 2006	5 and 6	Raw Coal Overland Conveyor (#377) - 48" wide - 700 FPM belt speed - receives raw coal from CC10 and transfers it to BC38 (see Black Stallion Mine below)	2,250	10,050,000	PE	B A	NA T73	NA FE
Black Stallion Mine									
BC37	C - 2004	5 and 6	Black Stallion Mine Conveyor (#361) - 60" wide - 800 FPM belt speed - receives raw coal from the mine and transfers it to BC38	3,500	10,500,000	PE	B A	NA T66	NA PE
BC38	C - 2004	5 and 6	Raw Coal Conveyor (#362) - 60" wide - 800 FPM belt speed - receives raw coal from BC37 and BC43 and transfers it to OS5	3,500	10,500,000	PE	B B A	T66 T73 T67	PE FE PE
OS5	----	5 and 6	Lower Area Clean/Raw Coal Open Storage Pile w/ Stacking Tube - maximum 105,000 tons capacity and 110,000 ft ² base area - receives raw coal from BC38 or trucks via HR3, stores it and then an endloader loads it to trucks or it drops to BC39	----	10,500,000	N	B B A A	T67 T47 T68 T48	PE N FE N

Equipment ID #	Date of Construction, Reconstruction or Modification ¹	G10-D Applicable Sections ²	Emission Unit Description	Design Capacity		Control Device ³	Associated Transfer Points		
				TPH	TPY		Location: B -Before A -After	ID No.	Control Device ³
BC39	C - 2004	5 and 6	Raw Coal Reclaim Conveyor (#363) - 48" wide - 700 FPM belt speed - receives raw coal from OSS5 and transfers it to BC40	2,000	10,500,000	PE	B A	T68 T69	FE FE
BC40	C - 2004	5 and 6	Raw Coal Conveyor (#364) - 48" wide - 700 FPM belt speed - receives raw coal from BC39 and transfers it to BC41	2,000	10,500,000	PE	B A	T69 T70	FE FE
BC41	C - 2004	5 and 6	Raw Coal Conveyor (#364) - 48" wide - 700 FPM belt speed - receives raw coal from BC40 and transfers it to BC42	2,000	10,500,000	PE	B A	T70 T71	FE FE
BC42	C - 2006	5 and 6	Raw Coal Overland Conveyor (#364) - 48" wide - 700 FPM belt speed - receives raw coal from BC41 and transfers it to BC7 (see Lightfoot Mine and Raw Coal Silos below)	2,000	10,500,000	PE	B A	T71 T72	FE FE
Lightfoot Mines No. 2 and Raw Coal Silos									
BC4	C - 1978	5 and 6	Lightfoot No. 2 Mine Belt Conveyor - 48" wide - 800 FPM belt speed - receives raw coal from the mine and transfers it to BC8A	2,500	10,500,000	PE	B A	NA T3A	NA FE
BC8A	C - 1978	5 and 6	Raw Coal Conveyor - 48" wide - 800 FPM belt speed - receives raw coal from BC4 and transfers it to BS4	2,500	10,500,000	PE	B A	T3A T8A	FE FE
BS4	----	5 and 6	Raw Coal Silo - 6,000 tons capacity - receives raw coal from BC8A or BC11, stores it and then drops it to BC14 (see Raw Coal to Preparation Plant below) or through a chute to OS4 (see below)	----	10,500,000	FE	B B A A	T8A T8 T13 T9	FE FE FE FE
BC7	C - 1978	5 and 6	Raw Coal Conveyor (#205) - 48" wide - 800 FPM belt speed - receives raw coal from BC42 and transfers it to BC8	2,500	10,500,000	FE	B A	T72 T3	FE FE
BC8	C - 1978	5 and 6	Raw Coal Conveyor - 48" wide - 800 FPM belt speed - receives raw coal from BC7 and transfers it to BS5	2,500	10,500,000	FE	B A	T3 T7	FE FE
BS5	----	5 and 6	Raw Coal Silo - 6,000 tons capacity - receives raw coal from BC8, stores it and then drops it to BC14 (see Raw Coal to Preparation Plant below) or through a chute to OS4	----	10,500,000	FE	B A A	T7 T12 T9	FE FE FE
OS4	----	5 and 6	Raw Coal Silo Overflow Open Storage Pile - maximum 15,000 tons capacity and 12,000 ft ² base area - receives raw coal from BS4 and BS5, stores it and then an endloader moves it to BS6	----	210,000	N	B A	T9 T10	FE FE
BS6	----	5 and 6	Endloader Feed Bin - 4 tons capacity - receives raw coal from an endloader and drops it onto BC14 (see Raw Coal to Preparation Plant below)	----	210,000	PW	B A	T10 T11	PW PE
CC11 Mine and Foreign Coal Hopper									
BC5	C - 1978	5 and 6	CC11 Mine Raw Coal Conveyor - 48" wide - 800 FPM belt speed - receives raw coal from the mine and transfers it to BS2	2,500	10,500,000	PE	B A	NA T4	NA PW
BS2	C - 1978	5 and 6	Foreign Coal Dump Hopper - 50 tons capacity - receives raw coal from BC5 and trucks and drops it to BC6	----	10,500,000	PW	B A	T4 T5	PW FE
BC6	C - 1978	5 and 6	Raw Coal Conveyor - 48" wide - 800 FPM belt speed - receives raw coal from BS2 and transfers it to BS3 or BC11	2,500	10,500,000	PE	B A	T5 T6	FE FE
BS3	----	5 and 6	Raw Coal Silo - 5,000 tons capacity - receives raw coal from BC6, stores it and then drops it to BC14 (see Raw Coal to Preparation Plant below)	----	10,500,000	FE	B A	T6 T14	FE FE
BC11	C - 1978	5 and 6	Silo Transfer Conveyor - 48" wide - 800 FPM belt speed - receives raw coal from BC6 and transfers it to BS4 (see Lightfoot Mines No. 2 and Raw Coal Silos above)	2,500	10,500,000	PE	B A	T6 T8	FE FE

Equipment ID #	Date of Construction, Reconstruction or Modification ¹	G10-D Applicable Sections ²	Emission Unit Description	Design Capacity		Control Device ³	Associated Transfer Points		
				TPH	TPY		Location: B -Before A -After	ID No.	Control Device ³
Raw Coal to Preparation Plant									
BC14	C - 1978	5 and 6	Breaker/Screen Feed Conveyor - 48" wide - 700 FPM belt speed - receives raw coal from BS3, BS4, BS5 and BS6 and transfers it to S1 or CR1	2,000	10,500,000	PE	B B B A	T14 T13 T12 T11 T15	FE FE FE PE FE
S1	C - 2000	5 and 6	Double Deck Banana Scalping Screen - receives raw coal from BC14, sizes it and drops the fines to BC15 and oversize to CR1	2,000	10,500,000	FE	B A A	T15 T17 T16	FE FE FE
BC15	C - 2000	5 and 6	Under Screen Conveyor - 60" wide - 300 FPM belt speed - receives fine raw coal from S1 and transfers it to BC16 or BC18	1,000	7,000,000	PE	B A A	T17 T18 T19	FE FE FE
BC18	C - 2000	5 and 6	Prep Plant Bypass Conveyor - 36" wide - 600 FPM belt speed - receives fine raw coal from BC15 and transfers it to BC19 (see Clean Coal Storage and Loadout below)	1,000	7,000,000	PE	B A	T19 T21	FE FE
CR1	C - 1990	5 and 6	Rotary Breaker - receives oversize raw coal from S1, crushes it and drops crushed coal to BC16 and refuse to BC28 (see Refuse Circuit below)	1,500	10,500,000	FE	B A A	T16 T18 T35	FE FE PE
BC16	C - 2000	5 and 6	Sized Product Conveyor - 48" wide - 500 FPM belt speed - receives sized raw coal from CR1 and transfers it to BC17	1,400	10,500,000	PE	B A	T18 T20	FE FE
BC17	C - 2000	5 and 6	Main Prep Plant Feed Conveyor - 48" wide - 500 FPM belt speed - receives sized raw coal from BC16 and transfers it to the wet wash preparation plant	1,400	10,500,000	PE	B A	T20 T20A	FE FE
Cook Mountain Lower Area									
OS8	----	5 and 6	Cook Mountain Lower Open Storage Pile - maximum 5,500 tons capacity and 1,370 ft ² base area - receives direct ship coal from trucks, stores it and then an endloader transfers it to BS8	----	315,000	N	B A	T56 T55	MC PW
BS8	----	5 and 6	Cook Mountain Lower Raw Coal Bin -100 tons capacity - receives direct ship coal from trucks and OS8 via endloaders and drops it to CR2	----	2,000,000	PW	B A	T55 T57	PW FE
BS9	----	5 and 6	Cook Mountain Lower Raw Coal Bin -100 tons capacity - receives direct ship coal from trucks, endloaders and BC22 and drops it to CR2	----	2,000,000	PW	B A	T55 T57	PW FE
CR2	2000	5 and 6	Hammermill Crusher w/ Vibrating Feeder - receives direct ship coal from BS8 and BS9, crushes it and then drops it to BC23	1,500	2,000,000	FE	B A	T57 T58	FE FE
BC23	1970	5 and 6	Cook Mountain Lower Transfer Belt Conveyor - 48" wide - 600 FPM belt speed - receives crushed direct ship coal from BS8 and BS9 and transfers it to BS10 or BS11 (see Clean Coal Storage and Loadout below)	1,500	2,000,000	PE	B A	T58 T60	FE FE
Clean Coal Storage and Loadout									
BC19	C 1978	5 and 6	Clean Coal Output Belt Conveyor - 42" wide - 700 FPM belt speed - receives clean coal from the wet wash preparation plant and transfers it to BC20	1,550	6,000,000	PE	B B B B B B A	T20D T20E T20F T20G T20H T20I T21 T22	PE PE PE PE PE FE FE
BC20	C 1978	5 and 6	Clean Coal Belt Conveyor - 42" wide - 700 FPM belt speed - receives clean coal from BC19 and transfers it to BS10 or BC21	1,550	6,000,000	PE	B A	T22 T23	FE FE

Equipment ID #	Date of Construction, Reconstruction or Modification ¹	G10-D Applicable Sections ²	Emission Unit Description	Design Capacity		Control Device ³	Associated Transfer Points		
				TPH	TPY		Location: B -Before A -After	ID No.	Control Device ³
BS10	----	5 and 6	Clean Coal Silo - 5,000 tons capacity - receives clean coal from BC20 and direct ship coal from BC23, stores it and then drops it to BC26	----	6,000,000	FE	B A	T23 T27	FE FE
BC21	C 1978	5 and 6	Clean Coal Belt Conveyor - 42" wide - 700 FPM belt speed - receives clean coal from BC20 and transfers it to BS11 or BC24	1,550	6,000,000	PE	B A	T23 T24	FE FE
BS11	----	5 and 6	Clean Coal Silo - 5,000 tons capacity - receives clean coal from BC21 and direct ship coal from BC23, stores it and then drops it to BC26	----	6,000,000	FE	B A	T24 T28	FE FE
BC26	C 1978	5 and 6	Under Clean Coal Silos Conveyor - 42" wide - 700 FPM belt speed - receives clean and direct ship coal from BS10 and BS11 and transfers it to BC26A	2,000	6,000,000	FE	B A	T28 T29	FE PE
BC26A	C 1978	5 and 6	Clean Coal Conveyor - 42" wide - 700 FPM belt speed - receives clean and direct ship coal from BC26 and transfers it to BC27 (see below)	2,000	6,000,000	PE	B A	T29 T29A	PE PE
BC24	C 1978	5 and 6	Clean Coal Conveyor - 42" wide - 700 FPM belt speed - receives clean coal from BC21 and transfers it to OS1 or BC25	1,550	6,000,000	PE	B A	T24 T25	FE PE
OS1	----	5 and 6	Clean Coal Open Storage Pile w/ Stacking Tube - maximum 75,000 tons capacity and 53,000 ft ² base area - receives clean coal from BC24, stores it and then it drops to BC27	----	6,000,000	N	B A	T25 T30	PE FE
BC25	C 1978	5 and 6	Clean Coal Belt Conveyor - 42" wide - 700 FPM belt speed - receives clean coal from BC24 and transfers it to OS2	850	6,000,000	PE	B A	T25 T26	PE PE
OS2	----	5 and 6	Clean Coal Open Storage Pile w/ Stacking Tube - maximum 75,000 tons capacity and 53,000 ft ² base area - receives clean coal from BC25, stores it and then it drops to BC27	----	6,000,000	N	B A	T26 T31	PE FE
BC27	C 1990	5 and 6	Railroad Loadout Conveyor - 42" wide - 800 FPM belt speed - receives clean and direct ship coal from OS1, OS2 and BC26A and transfers it to BS12	4,000	6,000,000	FE	B A	T29A T33	PE FE
BS12	----	5 and 6	Train Loadout Bin - 200 tons capacity - receives clean and direct ship coal from BC27 and then loads it to railcars	----	6,000,000	FE	B A	T33 T34	FE TC
Portable Screening Unit									
H-1	C July 2009	5 and 8	Portable Hopper - receives clean coal from OS1 via an endloader and drops it to PS-1	500	500,000	PW	B A	T1P T??	PE ????
PS-1	C July 2009	5 and 8	Portable Single Deck Screen - receives clean coal from H-1, sizes it and the -2" fine coal drops to BC-1P while the +2" oversize coal drops to BC-2P	500	500,000	PW	B A A	T?? T2P T4P	???? FW FW
BC-1P	C July 2009	5 and 8	Portable Belt Conveyor - receives -2" fine coal from PS-1 and transfers it to OS2 (see Clean Coal Storage and Loadout above)	500	375,000	N	B A	T2P T3P	FW N
BC-2P	C July 2009	5 and 8	Portable Belt Conveyor - receives +2" oversize coal from PS-1 and transfers it to OS1 (see Clean Coal Storage and Loadout above)	500	125,000	N	B A	T4P T5P	FW N
Refuse Circuit									
BC28	C 1978	5 and 6	CR1 Reject Conveyor - receives oversize refuse from CR1 and transfers it to BC30 (see below)	750	5,300,000	PE	B A	T35 T36	PE PE
BC29	C 1978	5 and 6	Preparation Plant Reject Conveyor - receives refuse from the preparation plant and transfers it to BC30	750	5,300,000	PE	B B A	T20B T20C T37	PE PE FE
BC30	C 1978	5 and 6	Refuse Transfer Conveyor - receives refuse from BC28 and BC29 and transfers it to BS13 or BC31	750	5,300,000	PE	B B A	T36 T37 T38	PE FE FE

Equipment ID #	Date of Construction, Reconstruction or Modification ¹	G10-D Applicable Sections ²	Emission Unit Description	Design Capacity		Control Device ³	Associated Transfer Points		
				TPH	TPY		Location: B -Before A -After	ID No.	Control Device ³
BS13	-----	5 and 6	Refuse Bin - 300 tons capacity - receives refuse from BC30 and then loads it to trucks	-----	5,300,000	FE	B A	T38 T39	FE PE
BC31	C 1978	5 and 6	Refuse Transfer Conveyor [Underground] - receives refuse from BC30 and transfers it to BS14 or BC32	750	5,300,000	PE	B A	T38 T40	FE FE
BC32	C 1978	5 and 6	Refuse Transfer Conveyor - receives refuse from BC31 and transfers it to BS14 or BC33	750	5,300,000	PE	B A	T40 T41	FE FE
BS14	-----	5 and 6	Refuse Bin - 1,000 tons capacity - receives refuse from BC32 and then loads it to trucks	-----	5,300,000	FE	B A	T41 T42	FE PE
BC33	C 1978	5 and 6	Refuse Transfer Conveyor - receives refuse from BC32 and transfers it to BS15 or BC34	750	5,300,000	PE	B A	T41 T43	FE FE
BS15	-----	5 and 6	Refuse Bin - 500 tons capacity - receives refuse from BC33 and then loads it to trucks	-----	5,300,000	FE	B A	T43 T44	FE PE
BC34	C 1990	5 and 6	Refuse Transfer Conveyor - receives refuse from BC33 and transfers it to OS3	750	5,300,000	PE	B A	T43 T45	FE N
OS3	-----	5 and 6	Refuse Open Storage Pile - maximum 10,000 tons capacity and 10,000 ft ² base area - receives refuse from BC34, stores it and then an endloader loads it to trucks	-----	210,000	N	B A	T45 T46	N N

- ¹ 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.
- 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. Section 5 is for Coal Preparation and Processing Plants and Coal Handling Operations. Section 6 is for Standards of Performance for Coal Preparation and Processing Plants that Commenced Construction, Reconstruction or Modification after October 27, 1974, and on or before April 27, 2008 (40 CFR 60 Subpart Y). Section 7 is for Standards of Performance for Coal Preparation and Processing Plants that Commenced Construction, Reconstruction or Modification after April 28, 2008, and on or before May 27, 2009 (40 CFR 60 Subpart Y). Section 8 is for Standards of Performance for Coal Preparation and Processing Plants that Commenced Construction, Reconstruction or Modification after May 27, 2009 (40 CFR 60 Subpart Y).
- ³ Control Device Abbreviations: FW - Full Enclosure with Water Sprays; FE - Full Enclosure; PW - Partial Enclosure with Water Sprays; PE - Partial Enclosure; TC - Telescopic Chute; WS - Water Sprays; and N - None.

SITE INSPECTION

On February 29, 2016, Fred Teel of the DAQ's Compliance and Enforcement Section performed a full compliance evaluation. Mr. Teel's notes from the inspection indicate that the facility is probably in a long term shut down. The facility was given a status code of 91: Permanent Shutdown.

Directions from Charleston are to take US Route 119 South, take the exit for Danville/Madison, turn left to get onto State Route 85 South to Wharton, WV and then go approximately 0.5 miles further and the facility will be on the left side of the road between Bim and Pondco.

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 using the DAQ's G10-C Excel Emission Calculation Spreadsheet and were checked for accuracy and completeness by the writer.

The proposed modifications will result in a new potential to discharge controlled particulate matter emissions of 119.20 pounds per hour (lb/hour) and 641.10 tons per year (TPY) of particulate matter (PM), of which 50.45 lb/hour and 220.20 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-wide potential to discharge for PM and PM₁₀:

- New Facility-wide Emissions Total - Rockwell Mining, LLC Wells Prep Plant	Controlled PM Emissions		Controlled PM₁₀ Emissions	
	lb/hour	TPY	lb/hour	TPY
Fugitive Emissions				
Open Storage Pile Emissions	0.89	3.91	0.42	1.84
Unpaved Haulroad Emissions	26.95	387.59	7.95	114.40
Paved Haulroad Emissions	3.49	50.16	0.70	10.03
<i>Fugitive Emissions Total</i>	<i>31.33</i>	<i>441.66</i>	<i>9.07</i>	<i>126.27</i>
Point Source Emissions				
Equipment Emissions	62.00	135.00	29.14	63.45
Transfer Point Emissions	25.88	64.44	12.24	30.48
<i>Point Source Emissions Total (PTE)</i>	<i>87.88</i>	<i>199.44</i>	<i>41.38</i>	<i>93.93</i>
FACILITY EMISSIONS TOTAL	119.21	641.10	50.45	220.20

REGULATORY APPLICABILITY

NESHAPS and PSD have no applicability to the proposed facility. The modification of Rockwell Mining, LLC's existing wet wash coal preparation plant and railcar loadout 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 involve the after-the-fact construction of one conveyor, which is defined as an affected facility and subject to 40 CFR 60 NSPS Subpart Y. The applicant has submitted an application for a G10-D general permit registration to modify. The applicant published a Class I legal advertisement in the *Coal Valley News* on March 11, 2015 and submitted \$500 for the General Permit application fee and \$1,000 for the NSPS fee. The applicant published a revised Class I legal advertisement in the *Coal Valley News* on August 12, 2015

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 addition does not involve the construction or modification of any equipment that are defined as affected facilities in 40 CFR 60 Subpart Y. Therefore, the proposed modification is *not* 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 constructed, re-constructed 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 constructed, re-constructed or modified after April 28, 2008) when the particulate matter control methods and devices proposed are in operation.

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 (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 93.93 TPY for PM₁₀ (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 a nonmajor source subject to 45CSR30. The facility is not subject to the permitting requirements of 45CSR30 and will be classified as a deferred source.

The proposed modification of Rockwell Mining, LLC's wet wash coal preparation plant is not 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 199.44 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 being emitted from this facility are PM (particulate matter) and PM₁₀ (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 proposed facility. This existing facility is located in Boone County, WV, which is currently in attainment for PM (particulate matter) and PM₁₀ (particulate matter less than 10 microns in diameter). This existing facility is a minor source as defined by 45CSR14, therefore, an air quality impact analysis is not required.

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.

RECOMMENDATION TO DIRECTOR

The information contained in this general 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. No comments were received during the comment period. Therefore, the granting of a General Permit G10-D registration to Rockwell Mining, LLC for the modification of their existing wet wash coal preparation plant and railcar loadout located near Wharton, Boone County, WV is hereby recommended.



Daniel P. Roberts
Daniel P. Roberts, Engineer Trainee
NSR Permitting Section

April 7, 2016
Date