



west virginia department of environmental protection

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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.: G10-D086G **After-the-Fact**
Plant ID No.: 019-00012
Applicant: Maple Coal Co., LLC
Facility Name: Katie Preparation Plant
Location: Powellton, Fayette County, WV
SIC Codes: 1221 (Bituminous Coal & Lignite - Surface)
1222 (Bituminous Coal & Lignite - Underground)
NAICS Codes: 212111 (Bituminous Coal and Lignite Surface Mining)
212112 (Bituminous Coal Underground Mining)
Application Type: Modification
Received Date: November 10, 2014
Engineer Assigned: Dan Roberts
Fee Amount: \$1,500
Date Received: January 27, 2014 - carried over from application G10-D086F which was withdrawn November 21, 2014
Complete Date: March 24, 2014
Applicant's Ad Date: December 29, 2014
Newspaper: *The Montgomery Herald*
UTM's: Easting: 470.49327 km Northing: 4213.42928 km NAD83 Zone 17N
Lat/Lon Coordinates: Latitude: 38.07000 • Longitude: -81.33639 • NAD83
Description: **After-the-Fact** modification to do the following: add a 300 TPH and 100,000 TPY portable crushing and screening plant to be located near the surface mine and consisting of crusher CR-3, screen SC-1, stockpiles OS-4 and OS-5, conveyors BC-23, BC-24, BC-25 and BC-26 and associated haulroad traffic; add fine clean coal belt conveyors BC-21 and BC-22 and stockpile OS-3 adjacent to the wet wash preparation plant; and increase the round trip length of the refuse haul road from truck loadout bin BS-9 to the refuse disposal area from 2.5 miles to the actual haul distance of 4.20 miles.

BACKGROUND

Maple Coal Co., LLC owns and operates the existing Katie Preparation Plant under current permit G10-D086D, which was approved on November 19, 2012. Maple Coal Co., LLC is a subsidiary of Atlantic Development Capital, LLC.

In January 2015, the applicant submitted the appropriate paper work to change the company's name from Maple Coal Company to Maple Coal Co., LLC. I called Jennifer Rice on January 9, 2015 and she stated that the name change paperwork was received on January 7, 2015 and that she just got it today and it is on top of the stack.

This is an **After-the-Fact** application. Conveyor BC21 was installed and operating by October 17, 2013. Conveyor BC22 and stockpile OS-3 were constructed and operating by October 9, 2014. The in-pit portable crusher along with stockpiles OS-4 and OS-5 were added and operating by January 16, 2014. The portable screen system and associated conveyors BC24, BC25 and BC26 were added and operating by July, 2014.

PERMIT HISTORY

This facility was previously permitted under permit R13-1160A approved on January 14, 1998 and issued to Cyprus Kanawha Corporation. On April 19, 1999, the DAQ issued a letter acknowledging the transfer of all of the associated permits with facility ID No. 019-00012 to Kanawha River Mining Company. On December 20, 2004, the DAQ issued a letter acknowledging the transfer of all of the associated permits with facility ID No. 019-00012 to LCC West Virginia, LLC. Maple Coal Co. purchased this facility during bankruptcy proceedings.

According to the database, the wet wash preparation plant was shut down sometime in 1991 and was not maintained. With the issuance of R13-1160A on January 14, 1998, the facility was reconfigured and operated as a transloading facility only for a year or two. Andy Grimm of the DAQ's Compliance and Enforcement Section conducted a site inspection on February 20, 2003 and noted that the facility had been shut down since 1991 with no plans to re-start. John Money Penny of the DAQ's Compliance and Enforcement Section conducted a site inspection on May 24, 2004 and noted that the facility was in very bad shape and probably needed a total rebuild if it was to resume operation.

Pete Gant, the company's consultant, set up a meeting on January 24, 2006 to discuss the start-up of this plant. Maple Coal Co. submitted application G10-C086 on February 24, 2006. Phase I would consist of obtaining a G10-C registration as soon as possible for the portable screening and crushing facility to be permitted under G10-C086, which was approved on June 5, 2006. The processing facility would have been located in the pit of the active surface mining area, not at the site of the existing, but shut down, preparation plant and transloading facility. The existing preparation plant and transloading facility was not to resume operation before obtaining a modified G10-C registration due to the amount of time that the operations have been shut down.

On June 19, 2006, the DAQ received application G10-C086A from Maple Coal Co. This application proposed the construction of a new wet wash preparation plant and railcar loadout. Registration G10-C086A was approved on September 21, 2006.

On August 01, 2008, the DAQ received application G10-C086B from Maple Coal Co. This application proposed to add two belt conveyors BC16 and BC17 with maximum capacities of 2,000 TPH and 1,000,000 TPY to transfer raw coal from the Eagle Deep Mine to existing bin BS2. Also, Maple Coal Co. removed the previously permitted, but never constructed, screening and crushing facility that was to be located in the pit area of the surface mine which would have consisted of bin BS1; screen SC1; crusher CR1; stockpiles OS1, OS2 and OS3; and belt conveyors BC1, BC2 and BC3. Registration G10-C086B was approved on October 03, 2008.

On May 24, 2010, the DAQ received application G10-D086C from Maple Coal Co. This application proposed to add three belt conveyors BC-18, BC-19 and BC-20; two stockpiles OS-1 and OS-2; one refuse bin BS9 and additional haulroad traffic. In addition, belt conveyors BC13 and BC14 were to be removed and throughputs modified.

On July 31, 2012, James Jarrett of the DAQ's Compliance and Enforcement Section conducted a full on-site, targeted inspection and noted that the clean coal crusher CR1 inside the preparation plant yet outside the wet wash circuit was not included in the permit. On September 28, 2012, the DAQ received application G10-D086D from Maple Coal Co. This application proposed to correct that oversight.

On December 12, 2013, the DAQ received application G10-D086E from Maple Coal Co. This application proposed to add fine clean coal belt conveyor BC-21 and open storage pile OS-3 adjacent to the wet wash preparation plant. Open storage pile OS-3 will later be replaced with truck loadout bin BS10.

On January 22, 2014, the DAQ received application G10-D086F from Maple Coal Co. This application proposed to add a portable crusher to be located near the surface mine.

The writer had ongoing discussions with the company's consultant Pete Gant of Mountain State Company regarding additional modifications that the company wanted to incorporate at the facility which included adding a screen in addition to the proposed portable crusher. It was agreed that the best course of action would be to withdraw the pending applications G10-D086E and G10-D086F and then submit a revised application which addressed all of the proposed modifications. The writer requested the withdrawal letters to be sent to the DAQ at that time. Mr. Gant insisted that the company wanted to submit the withdrawal letters at the same time that the revised application was submitted. Revised application G10-D086G was received on November 10, 2014. On November 19, 2014, the writer gave a deadline to Mr. Gant to submit the withdrawal letters. After a long delays on the company/consultants parts, applications G10-D086E and G10-D086F were officially withdrawn on November 21, 2014.

DESCRIPTION OF PROCESS

Within this application, a portable crushing and screening plant is proposed to be added within the confines of the existing surface mine (S-3007-95). Raw coal will be trucked by rock truck or other means from the active surface mine area to and dumped onto open stockpile OS4 at T51

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(NC). From there, an endloader will transfer the raw coal to directly into crusher CR3 via the crusher feed bin at T52 (PE). Crusher CR3 will be fully enclosed and fitted with operational water sprays. The crushed raw coal will then drop onto conveyor BC23 at T53 (FE), which will transfer it to triple deck screen SC1 at T54 (PE). Screen SC1 classifies the raw coal and then it is placed on one of three conveyors. Stoker coal is deposited on conveyor BC24 at T55 (PE), which transfers it onto stockpile OS-5A at T56 (N). Fine coal is deposited on conveyor BC25 at T57 (PE), which transfers it onto stockpile OS-5B at T58 (N). Oversize coal is deposited on conveyor BC26 at T59 (PE), which transfers it onto stockpile OS-5A at T60 (N). The raw coal will drop less than 20' onto the open stockpiles. The raw coal is then transferred by an endloader and loaded into trucks at T61 (PE).

Raw coal from the underground mine enters the circuit at transfer point T31 (PE) where the coal is transferred from the mine belt onto BC16. BC16 then transfers the coal to BC17 at T32 (PE). Coal is then transferred to conveyor BC19 or bin BS2 at T33 (WS/PE). Conveyor BC19 (PE) diverts the raw coal into open stockpile OS-1 at T38 (N). Stockpiled coal will be loaded out from OS-1 and back into BS2 either by endloader at T39 (WS/PE), or shoved into the bin by a dozer.

From bin BS2, the coal falls through the bin into a rotary breaker (CR2) at T34 (FE). From there, the coal drops onto conveyor BC4 at T14 (FE). Raw coal from BC4 is then transferred to conveyor BC5 at T15 (FE). Coal from BC5 is then transferred to conveyor BC6 at T16 (FE). BC6 transfers it to Silo 1 BS6 at T17 (FE) or conveyor BC18 at T17 (FE). From Silo 1 BS6, coal is transferred to the plant feed conveyor BC7 at T18 (FE). The plant feed conveyor BC7 enters the wet wash preparation plant at T21 (FE). Conveyor (BC18) is at the top between the two raw coal silos (from BS8 to BS6) to divert coal into BS6 at times when the plant is not operating due to maintenance or equipment failure. This conveyor will employ a partial cover for its' length. Both transfer points of the conveyor are fully enclosed and existing (T17 and T22A).

Raw coal can also enter the facility at truck dump BS3 at T19 (WS/PE). From bin BS3, the coal drops onto conveyor BC10 at T19A (FE). From BC10, the coal is transferred to conveyor BC11 at T20 (FE). This conveyor BC11 then transfers the coal to Silo 2 BS8 at T22A (FE). From Silo 2 BS8, the coal then drops onto BC7 at T23 (FE) and then is transferred to the preparation plant.

Within the wet wash preparation plant building, there is a clean coal crusher CR1 (FE) being fed through T43 (FE) and exiting on existing conveyor BC8 at T44 (FE). This crusher will handle a maximum of 10% of the preparation plant production, while the other 90% bypasses it through T22 (FE) onto existing conveyor BC8.

Clean coal leaves the plant at T22 (FE) and onto BC8. The clean coal is then transferred into Silo 3 BS7 at T24 (FE). From Silo 3 BS7, the coal is transferred onto BC9 at T25 (FE). From BC9 clean coal is transferred into truck loading bin BS4 at T26 (FE). Bin BS4 loads the clean coal into trucks at T27 (telescopic chute).

Within this application, a clean coal fines circuit is being added. The fines are recovered by cyclones within the preparation plant building. These coal fines are loaded onto belt conveyor BC21 inside the plant at T46 (FE). BC21 transfer the coal fines out of the plant and onto belt conveyor BC-22 at T-46A (PE). BC-22 transfers the coal fines and drop them (less than 20') onto

existing stockpile OS-3 at T47 (N). An endloader then transfer the coal fines from OS-3 into trucks at T48 (PE).

Future plans call for the construction of truck loadout bin BS-10 to replace stockpile OS-3. When that occurs, the coal fines from BC-22 will drop into bin BS-10 at T49 (PE) and then be loaded into trucks at T50 (PE).

At open stockpile OS-2, excess coal in loaded trucks is taken off by a small excavator into the stockpile at T40 (N) in order to comply with DOT truck weight limit laws. This coal will be later loaded into a truck by an endloader at T41 utilizing a partial enclosure (the truck bed has 4 sides) when a full truckload was not achieved at the stockpile.

Within the wet wash preparation plant building, refuse drops onto conveyor BC12 at T45 (FE), which transfers it from the building. From the Amendment bin, an amendment (lime/kiln dust) is added to the refuse while traveling along BC12 at T30 (PE). The amendment bin gets loaded at T35 which uses a baghouse (BH) for emission controls. The refuse and amendment is then transferred from BC12 into refuse bin BS5 at T28 (FE) or onto conveyor BC20 at T28 (FE). From bin BS5, the refuse is transferred into a truck at T29 (telescopic chute).

Conveyor BC20 is at the top of the refuse bin BS5 and receives refuse at T28 (FE) and transfers it to another refuse truck loadout bin BS9 at T36 (PE). Transfer point T37, out of the bin and into trucks, has no controls, but the refuse is considered a wet product. Refuse trucked from BS9 to the refuse disposal area will be dumped at T42 that has no controls but, transfers a wet product.

The facility shall be modified and operated in accordance with the following equipment and control device information taken from registration applications G10-D086G, G10-D086D, G10-D086C, G10-C086B, G10-C086A and G10-C086 and any amendments thereto:

Equip-ment 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
Raw Coal Circuit - Portable Crushing and Screening Plant at Surface Mine									
OS4	C 2014	5 and 8	Raw Coal Open Stockpile - maximum 10,000 tons capacity, 175,000 ft ² base area and 25' height - receives raw coal from trucks, stores it and then an endloader transfers it to CR3	300	100,000	WS	B A	T51 T52	N PE
CR3	C 2014 *	5 and 8	Double Roll Crusher- receives raw coal from OS4 via an endloader, crushes it from <6" to 2" and then drops it onto BC23 (* CR3 was manufactured in 1999)	300	100,000	FE	B A	T52 T53	N FE
BC23	C 2014	5 and 8	Belt Conveyor - receives crushed raw coal from CR3 and transfers it to SC1	300	100,000	PE	B A	T53 T54	FE PE
SC1	C 2014	5 and 8	Triple Deck Screen - receives raw coal from BC23, classifies it and then drops the 2" stoker coal onto BC24, 3/8" fine coal onto BC25 and >2" oversize coal onto BC26	300	100,000	FE	B A A A	T54 T55 T57 T59	PE PE PE PE
BC24	C 2014	5 and 8	Belt Conveyor - receives 2" stoker raw coal from SC1 and transfers it to OS5	300	50,000	PE	B A	T55 T56	PE N
BC25	C 2014	5 and 8	Belt Conveyor - receives 3/8" fine raw coal from SC1 and transfers it to OS5	300	40,000	PE	B A	T57 T58	PE N

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
BC25	C 2014	5 and 8	Belt Conveyor - receives >2" oversize raw coal from SC1 and transfers it to OS5	300	10,000	PE	B A	T59 T60	PE N
OS5	C 2014	5 and 8	Raw Coal Open Stockpile Area - maximum 10,000 tons capacity, 120,000 ft ² base area and 25' height - receives sized raw coal from BC24, BC25 and BC26, stores it and then an endloader transfers it to trucks for shipment	300	100,000	WS	B B B A	T56 T58 T60 T61	N N N PE
Raw Coal Circuit - Eagle Deep Mine									
BC16	C 2008 *	5 and 8	Belt Conveyor - receives raw coal from the Eagle Deep Mine and transfers it to BC17 (*Constructed after October 2008)	2,000	1,500,000	PE	B A	T31 T32	PE PE
BC17	C 2008 *	5 and 8	Belt Conveyor - receives raw coal from BC16 and transfers it to BS2 or BC19 (*Constructed after October 2008)	2,000	1,500,000	PE	B A	T32 T33	PE PE/WS
BC19	C 2010	5 and 8	Belt Conveyor - receives raw coal from BC17 and transfers it to open stockpile OS1	600	750,000	PE	B A	T33 T38	PE/WS N
OS1	C 2010	5 and 8	Raw Coal Open Stockpile - maximum 20,000 tons capacity, 100,000 ft ² base area and 25' height - receives raw coal from BC19 when diverted from BS2. Coal will be loaded out of the stockpile and back into BS2 either by endloader or shoved into the bin by a dozer.	---	750,000	WS	B A	T38 T39	N PE/WS
BS2	C 2006	5 and 6	60 ton Raw Coal Bin - receives raw coal from BC17 or OS1 and then drops it to CR2	2,000 in 600 out	1,500,000	PE/WS	B B A	T33 T39 T34	PE/WS PE/WS FE
CR2	C 2006	5 and 6	Rotary Breaker - receives raw coal from BS2, crushes it from 6" to 2" and then drops it to BC4	600	1,500,000	FE	B A	T34 T14	FE FE
BC4	C 2006	5 and 6	Belt Conveyor - receives sized raw coal from CR2 and transfers it to BC5	600	1,500,000	PE	B A	T14 T15	FE FE
BC5	C 2006	5 and 6	Belt Conveyor - receives sized raw coal from BC4 and transfers it to BC6	600	1,500,000	PE	B A	T15 T16	FE FE
BC6	C 2006	5 and 6	Belt Conveyor - receives sized raw coal from BC5 and transfers it to BS6	600	1,500,000	PE	B A	T16 T17	FE FE
BS6	C 2006	5 and 6	Raw Coal Silo 1 - 4,200 tons capacity - receives sized raw coal from BC6, stores it and then drops it to BC7 (see Trucked Raw Coal Circuit). May also receive coal from BC18 at times when the plant is not operating due to maintenance or equipment failure.	600	3,000,000	FE	B A	T17 T18	FE FE
Trucked Raw Coal Circuit									
BS3	C 2006	5 and 6	Raw Coal Truck Dump Bin - 60 tons capacity - receives raw coal from trucks and then drops it to BC10	600	1,500,000	PE/WS	B A	T19 T19A	PE/WS FE
BC10	C 2006	5 and 6	Belt Conveyor - receives raw coal from BS3 and transfers it to BC11	600	1,500,000	PE	B A	T19A T20	FE FE
BC11	C 2006	5 and 6	Belt Conveyor - receives raw coal from BC10 and transfers it to BS8 or BC7	600	1,500,000	PE	B A	T20 T22A	FE FE
BS8	C 2006	5 and 6	Raw Coal Silo 2 - 2,000 tons capacity - receives raw coal from BC11, stores it and then drops it to BC7	600	1,500,000	FE	B A	T22A T23	FE FE
BC18	C 2010	5 and 8	Belt Conveyor - receives raw coal from BS8 to divert the coal into BS6 at times when the plant is not operating due to maintenance or equipment failure.	600	1,500,000	PE	B A	T17 T22A	FE FE
BC7	C 2006	5 and 6	Belt Conveyor - receives raw coal from BC11 and transfers it to the prep plant	600	3,000,000	PE	B B A	T18 T23 T21	FE FE FE
Clean Coal Circuit									

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
CR1	C 2012	5 and 8	Crusher - Receives clean coal, crushes then transfers to the clean coal silo feed conveyor BC8	200	285,000	FE	B B A A	T21 T43 T44 T45	FE FE FE FE
BC8	C 2006	5 and 6	Belt Conveyor - receives clean coal from the prep plant and transfers it to BS7	600	2,850,000	PE	B B A	T22 T44 T24	FE FE FE
BS7	C 2006	5 and 6	Raw Coal Silo 3 - 2,400 tons capacity - receives clean and direct ship coal from BC8, stores it and then drops it to BC9	600	1,350,000	FE	B A	T24 T25	FE FE
BC9	C 2006	5 and 6	Belt Conveyor - receives clean coal from the prep plant (or direct ship raw coal) and transfers it to BS4	600	2,850,000	PE	B A	T25 T26	FE FE
BS4	C 2006	5 and 6	Clean Coal Truck Loadout Bin - 60 tons capacity - receives clean and direct ship coal from BC9 and then loads it to trucks	600	1,350,000	FE	B A	T26 T27	FE TC
OS2	C 2010	5 and 8	Clean Coal Open Stockpile - maximum 1,000 tons capacity, 5,000 ft ² base area and 20' height - receives clean coal from outgoing loaded trucks. Raw coal is taken off the truck by a small excavator into the stockpile in order to comply with DOT truck weight limit laws. The clean coal will be loaded into a truck by an endloader when a full truckload is not achieved.	100 in 400 out	10,000	WS	B A	T40 T41	N PE
Clean Coal Fines Circuit									
BC21	C 2013	5 and 8	Belt Conveyor - receives clean coal fines from the cyclones within the preparation plant and transfers them to BC22	100	72,000	PE	B A	T46 T46A	FE PE
BC22	C 2014	5 and 8	Belt Conveyor - receives clean coal fines from BC21 and transfers them to OS-3 (or BS10 in the future)	100	72,000	PE	B A	T46A T47	PE N
OS3	C 2014	5 and 8	Clean Coal Fines Open Stockpile - maximum 100 tons capacity, 2,500 ft ² base area and 15' height - receives clean coal fines BC22, stores them and then an endloader loads them to trucks	100	72,000	WS	B A	T47 T48	N PE
Refuse Circuit									
BC12	C 2006	5 and 6	Belt Conveyor - receives refuse from the prep plant and with amendment added from the refuse amendment bin (vents to baghouse) and then transfers the amended refuse to BS5 or BC20	600	1,950,000	PE	B B B A	T35 T45 T30 T28	BH FE PE FE
BS5	C 2006	5 and 6	Refuse Truck Loadout Bin - 60 tons capacity - receives refuse from BC12 and then loads it to trucks	600	1,950,000	FE	B A	T28 T29	FE TC
BC20	C 2010	5 and 8	Belt Conveyor - receives refuse from BC12 and transfers it to BS9.	600	1,950,000	PE	B A	T29 T36	TC PE
BS9	C 2010	5 and 8	Refuse Truck Loadout Bin - 60 tons capacity - receives refuse from BC20. Refuse will be loaded into a truck from BS9 and taken to the refuse disposal area.	600	1,950,000	FE	B A	T36 T37	PE PE

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.
³ Control Device Abbreviations: FE - Full Enclosure; FE/WS - Full Enclosure with Water Sprays; PE - Partial Enclosure; PE/WS - Partial Enclosure with Water Sprays; WS - Water Sprays; TC - Telescopic Chute; BH - Baghouse; and N - No Control.
⁴ Dump bin BS-06 and belt conveyor BC-35 are currently out of service and would require a great deal of mechanical work to restore, but has been included for operational flexibility.

DESCRIPTION OF FUGITIVE EMISSIONS (taken directly from the application)

As per this modification, coal will be trucked to the proposed portable crusher from the surface mine. The maximum round trip is 3.44 miles. The road traveled is shown on the Area Map. An endloader will travel short distances between the open stockpiles OS4 (into the crusher) and OS5 (out of the crusher). Coal loaded from OS5 will be hauled by truck to the public road (9.70 miles round trip). The water truck that is used on roads elsewhere will also be used to control fugitive dust along these roads.

The same water truck will be used to control fugitive dust on OS4 and OS5. These piles will be less than 25 feet high, so the truck spray will be sufficient to water the pile. Compaction by on-site equipment may also be used to control fugitive dust.

Also as per this modification, the refuse haul has been corrected to the actual haul distance of 4.20 miles round trip.

SITE INSPECTION

Jamie Jarrett of the DAQ's Compliance and Enforcement Section performed a scheduled full on-site targeted inspection on July 31, 2012. Mr. Jarrett's notes from the inspection were as follows: "NSPS Subpart Y logbook and Open Stockpile Fugitive Coal Dust Emissions Control Plan not prepared. Clean coal crusher within preparation plant is not listed in the permit." At the time of the inspection, the facility was found not to be in compliance and was given a status code of 10 - Out of Compliance.

Directions to the facility from Charleston are to take I-77 South/I-64 East toward Beckley, take Exit 85 for US-60/Cheyman/Cedar Grove and merge onto the WV-61 spur travel 0.9 miles across the bridge, turn right onto E Dupont Ave/US-60 E and continue to follow WV-61 and travel 12.0 miles, take the ramp toward WV-61/Montgomery/WVU Tech and travel 0.05 miles, turn right onto WV-6/Earl M Vickers Memorial Bridge and continue to follow WV-6 and travel 0.4 miles, turn right onto 2nd Ave/WV-61 and continue to follow WV-61 and travel approximately 3.1 miles, turn slight right onto Armstrong Creek Rd/County Hwy-61/24 and travel approximately 4.6 miles, turn right onto Elkridge Road/County Road 6-1 and travel 2.2 miles to the preparation plant on the left.

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

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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 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 108.45 pounds per hour (PPH) and 278.62 tons per year (TPY) of particulate matter (PM), of which 33.62 PPH and 82.62TPY 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 - Maple Coal Co., LLC Katie Preparation Plant	Controlled PM Emissions		Controlled PM₁₀ Emissions	
	lb/hour	TPY	lb/hour	TPY
Fugitive Emissions				
Open Storage Pile Emissions	0.15	0.67	0.07	0.32
Unpaved Haulroad Emissions	99.27	276.41	29.30	81.59
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
<i>Fugitive Emissions Total</i>	<i>99.42</i>	<i>277.09</i>	<i>29.37</i>	<i>81.90</i>
Point Source Emissions				
Equipment Emissions	7.20	1.20	3.38	0.56
Transfer Point Emissions	1.84	0.33	0.87	0.16
<i>Point Source Emissions Total (PTE)</i>	<i>9.04</i>	<i>1.53</i>	<i>4.25</i>	<i>0.72</i>
INCREASE IN EMISSIONS	108.45	278.62	33.62	82.62

The proposed modification will result in a new facility-wide potential to discharge controlled particulate matter emissions of 167.09 PPH and 1,229.89 TPY of particulate matter (PM), of which 52.50 PPH and 365.06 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:

- New Facility-wide Emissions - Maple Coal Co., LLC Katie Preparation Plant	Controlled PM Emissions		Controlled PM ₁₀ Emissions	
	lb/hour	TPY	lb/hour	TPY
Fugitive Emissions				
Open Storage Pile Emissions	0.17	0.76	0.08	0.36
Unpaved Haulroad Emissions	149.00	1,218.29	43.98	359.59
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
<i>Fugitive Emissions Total</i>	<i>149.17</i>	<i>1,219.05</i>	<i>44.06</i>	<i>359.95</i>
Point Source Emissions				
Equipment Emissions	10.40	4.77	4.89	2.24
Transfer Point Emissions	7.51	6.07	3.55	2.87
<i>Point Source Emissions Total (PTE)</i>	<i>17.91</i>	<i>10.84</i>	<i>8.44</i>	<i>5.11</i>
FACILITY EMISSIONS TOTAL	167.09	1,229.89	52.50	365.06

REGULATORY APPLICABILITY

NESHAPS and PSD have no applicability to the modified facility. The proposed modification of Maple Coal Co., 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 and involve the construction of one crusher, one screen, six belt conveyors and three open stockpiles, which are defined as affected facilities in 40 CFR 60 Subpart Y. The applicant has submitted an application for a modification registration. The applicant published a Class I legal advertisement in *The Montgomery Herald* on December 31, 2014. The \$500 application fee and \$1,000 NSPS fee were carried over from application G10-D086F which was withdrawn on November 21, 2014.

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 one crusher, one screen, six belt conveyors and three open stockpiles, 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, 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 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 (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 5.57 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 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 Maple Coal Co., 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

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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 11.59 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 primary pollutants that will be 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 facility and the extent of the proposed modification. This facility is located in Fayette County, WV, which is currently in attainment for PM (particulate matter) and PM₁₀ (particulate matter less than 10 microns in diameter). This modified facility will remain a minor source as defined by 45CSR14, 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

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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 application for a modification registration 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 Maple Coal Co., LLC for the modification of their existing wet wash coal preparation plant located near Powellton, Fayette County, WV is hereby recommended.



Daniel P. Roberts, Engineer Trainee
NSR Permitting Section

March 27, 2015

Date