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**west virginia department of environmental protection**

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**ENGINEERING EVALUATION / FACT SHEET**

**BACKGROUND INFORMATION**

Application No.: R13-2306E  
Plant ID No.: 033-00018  
Applicant: Harrison County Coal Company  
Facility Name: Harrison County Preparation Plant  
Location: Shinnston, Harrison County, WV  
SIC Codes: 1222 (Bituminous Coal & Lignite - Underground)  
NAICS Codes: 212112 (Bituminous Coal Underground Mining)  
Application Type: Class II Administrative Update  
Received Date: May 18, 2015  
Engineer Assigned: Dan Roberts  
Fee Amount: \$300 application fee, \$1,000 NSPS fee  
Date Received: May 19, 2015, July 23, 2015  
Applicant's Ad Date: May 22, 2015  
Newspaper: *The Dominion Post*  
Complete Date: June 15, 2016  
UTM Coordinates: Easting: 554.82 km      Northing: 4361.54 km      NAD83 Zone 17N  
Lat/Lon Coordinates: Latitude: 39.401623      Longitude -80.363302      NAD83  
Description: Modification to increase the size of existing raw coal stockpile 006 from 4.9 acres (213,444 ft<sup>2</sup>) base area and 250,000 tons capacity to 9.69 acres (422,096.4 ft<sup>2</sup>) base area and 750,000 tons capacity.

**BACKGROUND**

Application R13-2306E was prepared and submitted by Consolidation Coal Company for the modification of their existing Robinson Run Preparation Plant and was received by the DAQ on May 18, 2015. On January 25, 2016, the DAQ received Permit Transfer Document requesting that the Consolidation Coal Company's Robinson Run Preparation Plant be transferred through a change of ownership to the Harrison County Coal Company's Harrison County Preparation Plant. As per the documentation, Robert D. Moore remains as the Vice President and the mailing address of 46226 National Road, St. Clairsville, Ohio 43950 remains the same. In a letter dated February 16, 2016,

the DAQ acknowledged the transfer.

Harrison County Coal Company proposes to modify their existing wet wash coal preparation plant located near Shinnston, Harrison County, WV. Pending permit R13-2306E will supercede and replace current permit R13-2306D, which was approved on August 27, 2010.

Harrison County Coal Company proposes to increase the size of existing raw coal stockpile 006 from 4.9 acres (213,444 ft<sup>2</sup>) base area and 250,000 tons capacity to 9.69 acres (422,096.4 ft<sup>2</sup>) base area and 750,000 tons capacity.

## PROCESS DESCRIPTION

Operations at the Harrison County Preparation Plant consist of conveying the raw coal procured from an existing mine portal to two (2) raw coal storage silos. From the raw coal storage silos, coal is conveyed to a breaker building, where the raw coal is screened and separated into two (2) distinct material streams: the refuse stream is crushed, conveyed to a rock storage bin, and ultimately transported to refuse storage piles by refuse trucks, while the “plant feed” coal is conveyed to a raw coal storage silo and the raw coal stockpile, and ultimately transported to the wet wash preparation plant. As described throughout this application, Harrison County Coal Company proposes to increase the base area of the raw coal stockpile to 9.69 acres (maximum storage of 750,000 tons) to increase operational flexibility. The project will not involve increases of the permitted hourly or annual maximum throughput of any other process equipment at the Harrison County Preparation Plant.

Two types of material exit the preparation plant. The first type of material is refuse. The refuse is conveyed to one (1) of three (3) refuse storage bins before ultimately being transferred to the refuse disposal area via truck. The second type of material existing the preparation plant is clean coal, which is raw coal that has been screened, sized, and washed in the preparation plant. From the wet wash preparation plant, clean coal is either conveyed to two (2) storage silos and ultimately loaded out via railcars or transported to the Harrison Power Station.

The facility shall be modified and operated in accordance with the following equipment and control device information taken from permit applications R13-2306E, R13-2306D, R13-2306C, R13-2306B, R13-2306A and R13-2306 and any amendments thereto:

Source ID	Emission Point ID	Equipment Description	Design Capacity		Date of Construction/Modification <sup>1</sup>	Control Device ID	Control Device <sup>2</sup>
			TPH	TPY			
<b>Raw Coal from Deep Mine Circuit</b>							
MB1	E-MB1 (TP1)	Mine Portal Belt	5,000	15,768,000	C 2005	NA	FE
MB2	E-MB2 (TP2)	Silo Feed Belt	5,000	15,768,000	C 2005	NA	FE
MB3	E-MB3 (TP3)	Silo Transfer Belt	5,000	15,768,000	C 2005	NA	FE
RCS2	E-RCS2 (TP4)	Raw Coal Storage Silo 2 - 10,000 capacity	-----	15,768,000 combined	C 2005	NA	FE

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Harrison County Coal Company  
Harrison County Preparation Plant

RCS3	E-RCS3 (TP5)	Raw Coal Storage Silo 3 - 10,000 ton capacity	----		C 2005	NA	FE
MB4	E-MB4 (TP6)	Silo Reclaim Belt	4,000	15,768,000	C 2005	NA	FE
MB5	E-MB5 (TP7)	Overland Mine Belt 1	4,000	15,768,000	C 2005	NA	FE
MB6	E-MB6 (TP8)	Overland Mine Belt 2	4,000	15,768,000	C 2005	NA	FE
A1	A003	Conveyor and Transfer Point	4,000	15,768,000	C 1994	DA003	FE
A2	A005	Conveyor and Transfer Point	4,000	15,768,000	C 1994	DA005	FE
A006	A006, A007	Scalping Screen A1 (rotary breaker building) and Transfer Points	4,000	15,768,000	C 1994	DA005	FE
A006A	A006A, A007A, A010	Rotary Breaker A1 (rotary breaker building) and Transfer Points (drop to A008, drop to rock bin, drop to pan)	1,000	3,942,000	C 1994	DA005, DA008	FE
010A	010A, A011	Rock Bin 1 - 100 ton capacity - and transfer point	----	175,200	C 1994	DA008, D033	FE
A3A	A007A	Conveyor and Transfer Point	4,000	15,768,000	C 1994	DA005A	FE
A3	003B, A009	Conveyor and Transfer Point	4,000	15,768,000	C 1994	D004	FE
<b>Raw Coal from Minecar/Truck Dump Building Circuit</b>							
037 <sup>3</sup>	037, 037A, 038, 039, 040, 041	Clean/Raw Coal Stockpile 2 - 240,000 ton capacity (wind erosion, grading, pan load-in, pan reclaim, truck load-in, endloader loadout)	----	10,512,000	C 1968	N/A	MC
001 <sup>3</sup>	001,001C	Rotary Dump and Truck Dump	1,200	100,000	C 1968	D001	PE
001A <sup>3</sup>	001A	Scalping Screen 1	1,200	100,000	C 1968	D002	FE
001B <sup>3</sup>	001B	Crusher 1	1,200	100,000	C 1968	D002	FE
C1 <sup>3</sup> (002)	002A, 003B	Conveyor and Transfer Points (raw coal to silo or conveyor)	1,200	100,000	C 1968	D004	FE
003 <sup>3</sup>	003A	Raw Coal Silo 1 - 6,000 ton capacity	----	15,768,000	C 1968	D005	FE
C2 (004)	005	Conveyor and Transfer Point (raw coal to stockpile)	4,000	10,000,000	C 1994	D006	FE
006	006, 012, 006A, 042, 043	Raw Coal Stockpile 1 - 750,000 ton capacity (wind erosion, pan reclaim, grading, truck load-in, pan load-in)	----	10,000,000	M 2015 C 1968	D011	ST, UC
C3, C4	007, 009	Conveyors (2) and Transfer Points (plant feed)	2,800	15,768,000	C 2002	D007, D009	FE, PE(TP-007)
<b>Prep Plant and Clean Coal Circuit</b>							
060	010C	Preparation Plant (raw & wet)	2,800	15,768,000	C 2002	D060, D040, D041	MC, EM, ES
D040 <sup>3</sup>	P003	Exhaust Fan and Dust Collector 1; removes PM from prep plant	N/A	N/A	C 1968	N/A	N/A
D041 <sup>3</sup>	P003	Scrubber; removes PM from prep plant	N/A	N/A	C 1968	N/A	N/A
C16	061	Conveyor and Transfer Point	1,800	15,768,000	C 2002	D061	FE
C17	62	Conveyor and Transfer Point	1,800	15,768,000	C 2002	D062	FE
C18	063	Conveyor and Transfer Point	1,800	15,768,000	C 2002	D063	FE

017 <sup>3</sup>	017A	Clean Coal Silo 1 - 10,000 ton capacity	-----	15,768,000	C 1968	D016	FE
C19	064	Conveyor and Transfer Point	1,800	15,768,000	C 2002	D064	FE
069	065	Clean Coal Silo - 25,000 ton capacity	4,000	15,768,000	C 2002	D065	FE
C20	066	Conveyor and Transfer Point	4,000	15,768,000	C 2002	D066	FE
C7A	067	Conveyor and Transfer Point	4,000	15,768,000	C 2002	D067	FE
C7	019, 021A	Conveyor and Transfer Points (clean coal to rail loadout or by-pass)	4,000	15,768,000	C 2002	D018	FE
SC1	STP2	Sample System Feed Conveyor	5	43,800	C 2002	NA	FE
CR1	STP3	Sample System Pulverizer	5	43,800	C 2002	NA	FE
SC2	STP4	Sample System Return Conveyor	5	43,800	C 2002	NA	FE
020 <sup>3</sup>	021	Railroad Loadout 1 - 100 ton capacity	4,000	15,768,000	C 1968	D019	FE, TC
C8 <sup>3</sup>	023	Conveyor and Transfer Point (rail loadout by-pass belt)	1,200	10,512,000	C 1968	D023	PE(conv eyor), FE (TP)
C9 <sup>3</sup>	024A	Conveyor and Transfer Point (initial belt in power plant feed)	1,300	11,388,000	C 1968	D042	PE, EM
D042 <sup>3</sup>	P002	Exhaust Fan 2 and Dust Collector 2; removes PM from transfer point	N/A	N/A	C 1968	N/A	N/A
C10 <sup>3</sup>	N/A	Conveyor and Transfer Point (second belt in power plant feed)	1,300	11,388,000	C 1968	N/A	FE
032	032, 033, 032A, 033A, 035, 036	Clean Coal Stockpile 1 - 40,000 ton capacity (wind erosion, reclaim to conveyor, grading, dozer to reclaim, truck load-in, pan load-in)	-----	8,760,000	C 1968	D028, D033	UC, MC
C12 (034)	034A	Conveyor and Transfer Point (clean coal destock feeder)	1,200	10,512,000	C 1968	D023	PE(con- veyor), FE (TP)
<b>Refuse Circuit</b>							
C21	068	Conveyor and Transfer Point (2010 - increased the maximum hourly throughput from 500 TPH to 800 TPH)	800	4,380,000	M 2010 C 2002	D068	FE
C11 (026)	027	Conveyor and Transfer Point (refuse) (2010 - increased the maximum hourly throughput from 500 TPH to 800 TPH)	800	4,380,000	M 2010 C 1981	D027	FE
C11A (026A)	C11A	Refuse Conveyor and Transfer Point (2010 - increased the maximum hourly throughput from 500 TPH to 800 TPH)	800	4,380,000	M 2010 C 1981	D027A	FE
028	029, 030	Refuse Bin 1 - 100 ton capacity - and Transfer Points (2010 - increased the maximum hourly throughput from 500 TPH to 800 TPH)	-----	4,380,000 <sup>3</sup>	M 2010 C 1981	N/A	FE
C11B	C11B	Refuse Conveyor and Transfer Point (2010 - increased the maximum hourly throughput from 500 TPH to 800 TPH)	800	4,380,000	M 2010 C 1981	N/A	FE

RB2	RTP3	Refuse Bin 2 - 300 ton capacity - and Transfer Points (2010 - increased the maximum hourly throughput from 500 TPH to 800 TPH)	----	4,380,000 <sup>3</sup>	M 2010 C 1981	N/A	FE
C11C	C11C	Refuse Conveyor	800	4,380,000	C 2010	NA	PE
RB3	RB3	Refuse Bin 3 - 300 ton capacity - and Transfer Points	----	4,380,000 <sup>3</sup>	C 2010	NA	FE
<b>Miscellaneous</b>							
031 <sup>3</sup>	031, 031A	Refuse Disposal Area 1 (wind erosion, grading)	----	----	C 1968	D033	WT
048A <sup>3</sup>	048A	Lime Storage Silo 1 - 50 ton capacity			C 1971	N/A	FE
048B <sup>3</sup>	048B	Lime Storage Silo 2 - 50 ton capacity			C 1971	N/A	FE
047 <sup>3</sup>	047	Rock Dust Bin 1 - 50 ton capacity			C 1968	N/A	FE
052A-F	052A-F	Haulroads	N/A	N/A	N/A	D033	WT

- <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 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.
- <sup>2</sup> FE - Full Enclosure; PE - Partial Enclosure; ST - Stacking Tube; WS - Water Sprays; N - None.
- <sup>3</sup> These pieces of equipment are considered grand-fathered since they were constructed before June 1, 1974 for 45CSR13 and October 24, 1974 for 40 CFR 60 Subpart Y and have not been modified since then.
- <sup>4</sup> The maximum annual throughput for 028, RB2 and RB3 combined shall not exceed 4,380,000 TPY.

## SITE INSPECTION

On March 18, 2016, the DAQ received the facility's 2015 Title V Annual Certification. Rebecca Johnson reviewed the documents and the facility was given a status code of 30: In Compliance.

On January 28, 2016, Karl Dettinger of the DAQ's Eastern Panhandle Regional Office performed a full-on site inspection. Mr. Dettinger's contact was Dave Roddy. Mr. Dettinger's notes from the inspection were as follows: "F.C.E. inspection of this facility was done on 1-28-16. Contact was David Roddy. No visible dust emissions were observed from any of the equipment while at the site. Photos were taken, and records reviewed." The facility was found to be in compliance at the time of the inspection and given a status code of 30: In Compliance.

Directions from Charleston are to take I-79 North, take Exit 125 for Shinnston, turn left onto State Route 131 West and travel to Shinnston, turn right onto U.S. Route 19 North, turn left onto County Route 3 and travel 2.8 miles, turn left onto County Road 3-4 and travel 1.2 miles to the preparation plant.

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 "Compilation of Air Pollution Emission Factors." 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. Emissions calculations were performed by the applicant's consultant and were checked for accuracy by the writer.

According to the Engineering Evaluation/Fact Sheet R13-2306D, the existing facility has the following estimated potential to discharge controlled emissions:

<i>- Existing Emissions Summary - Harrison County Coal Company R13-2306D</i>	<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	2.46	10.74	1.17	5.11
Unpaved Haulroad Emissions	150.56	423.68	44.44	125.06
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
<i>Fugitive Emissions Total</i>	<i>153.02</i>	<i>434.42</i>	<i>45.61</i>	<i>130.17</i>
<b>Point Source Emissions</b>				
Equipment Emissions	112.86	167.02	53.74	79.53
Transfer Point Emissions	40.24	97.48	19.16	46.42
Plant Exhaust Fans	5.20	22.78	2.48	10.84
<i>Point Source Emissions Total (PTE)</i>	<i>158.30</i>	<i>287.28</i>	<i>75.38</i>	<i>136.79</i>
<b>FACILITY EMISSIONS TOTAL</b>				
	<b>311.32</b>	<b>721.70</b>	<b>120.99</b>	<b>266.96</b>

The proposed modifications will result in an increase in the potential to discharge controlled emissions from point sources of 0.63 pounds per hour and 2.74 TPY of particulate matter (PM), of which 0.29 pounds per hour and 1.29 TPY will be particulate matter less than 10 microns in diameter (PM<sub>10</sub>). The writer used the DAQ's G10-C Excel spreadsheet to calculate the increase in emissions. A copy has been attached. Refer to the following table for a summary of the proposed increase in emissions:

- Proposed Increase in Emissions - Harrison County Coal Company R13-2306D	Controlled PM Emissions		Controlled PM <sub>10</sub> Emissions	
	lb/hour	TPY	lb/hour	TPY
<b>Fugitive Emissions</b>				
Stockpile Emissions	0.63	2.74	0.29	1.29
Unpaved Haulroad Emissions	0.00	0.00	0.00	0.00
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
<i>Fugitive Emissions Total</i>	<i>0.63</i>	<i>2.74</i>	<i>0.29</i>	<i>1.29</i>
<b>Point Source Emissions</b>				
Equipment Emissions	0.00	0.00	0.00	0.00
Transfer Point Emissions	0.00	0.00	0.00	0.00
Plant Exhaust Fans	0.00	0.00	0.00	0.00
<i>Point Source Emissions Total (PTE)</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
<b>FACILITY EMISSIONS TOTAL</b>	<b>0.63</b>	<b>2.74</b>	<b>0.29</b>	<b>1.29</b>

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

- New Facility-Wide Emissions - Harrison County Coal Company R13-2306D	Controlled PM Emissions		Controlled PM <sub>10</sub> Emissions	
	lb/hour	TPY	lb/hour	TPY
<b>Fugitive Emissions</b>				
Stockpile Emissions	3.09	13.48	1.46	6.40
Unpaved Haulroad Emissions	150.56	423.68	44.44	125.06
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
<i>Fugitive Emissions Total</i>	<i>153.65</i>	<i>437.16</i>	<i>45.90</i>	<i>131.46</i>
<b>Point Source Emissions</b>				
Equipment Emissions	112.86	167.02	53.74	79.53
Transfer Point Emissions	40.24	97.48	19.16	46.42
Plant Exhaust Fans	5.20	22.78	2.48	10.84
<i>Point Source Emissions Total (PTE)</i>	<i>158.30</i>	<i>287.28</i>	<i>75.38</i>	<i>136.79</i>
<b>FACILITY EMISSIONS TOTAL</b>	<b>311.95</b>	<b>724.44</b>	<b>121.28</b>	<b>268.25</b>

### REGULATORY APPLICABILITY

NESHAPS and PSD have no applicability to the proposed modification of Harrison County Coal Company's existing wet wash coal preparation plant. The proposed modification 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. The proposed modification involves the modification of one (1) existing raw coal open storage pile, which is defined as an affected facility in 40 CFR 60 Subpart Y. The proposed modification will result in a increase in the potential to discharge controlled emissions of a regulated air pollutant (PM, PM<sub>10</sub> and PM<sub>2.5</sub>) of less than six (6) pounds per hour and ten (10) tons per year. The DAQ received \$300 for the application fee on May 19, 2015 and \$1,000 for the NSPS fee on July 23, 2015. The applicant published a Class I legal advertisement in *The Dominion Post* on May 22, 2015.

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

The 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 will include the modification of one (1) existing raw coal open storage pile, which is defined as an affected facility in 40 CFR 60 Subpart Y. Therefore, the coal processing equipment 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 the following: 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.

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 wet wash coal preparation plant will continue to be a major source. 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 139.40 TPY for PM<sub>10</sub> (open storage piles constructed or modified after May 27, 2009 and point sources combined), which is greater than the 45CSR30 threshold of 100 TPY of a regulated air pollutant to be defined as a major stationary source. Therefore, the facility will continue to be subject to 45CSR30 and remain classified as a Title V major source.

Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.

The proposed modification of Harrison County Coal Company'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 wet wash coal preparation plant is not one of the 100 TPY stationary sources listed sources under the definition of "Major Stationary Source" in subsection 2.43.a. At the end of subsection 2.4.3, this facility is listed in Table 1 - Source Categories Which Must Include Fugitive Emissions. Therefore, fugitive emissions (from open storage piles and haulroads) are included when determining major stationary source applicability. The facility's potential to emit will 292.82 TPY for PM (open storage piles constructed or modified after May 27, 2009 and point sources combined). The facility's potential to emit for PM *is greater than* the 45CSR14 threshold of 250 TPY for a regulated air pollutant to be defined as a major stationary source.

In accordance with Section 2.75, the definition of "significant emission increase" is defined in Section 2.74 as equal to or greater than 25 TPY for PM, 15 TPY for PM<sub>10</sub> and 10 TPY for PM<sub>2.5</sub>. The proposed changes within this modification application will result in an increase in the potential to discharge of 2.74 TPY for PM and 1.29 TPY for PM<sub>10</sub>, which are less than the trigger levels for a significant increase as defined in 45CSR14.

## TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

A toxicity analysis was not performed because the proposed increases in pollutants being emitted from this facility are in 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 extent of the proposed modifications. This is a minor modification (as defined in 45CSR14) to an existing major source. This facility is located in Harrison County, WV, which currently has a status of attainment for PM<sub>10</sub> (particulate matter less than 10 microns in diameter) and PM<sub>2.5</sub> (particulate matter less than 2.5 microns in diameter).

## MONITORING OF OPERATIONS

The coal handling equipment and storage areas should be observed to make sure that the facility is meeting the applicable visible emission standards. In accordance with 45CSR5 and 40 CFR 60.254(a), all emissions from 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 should be less than 20% opacity. In accordance with 40 CFR 60.254(b), all emissions from 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 should be less than 10% opacity. 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.

For the purposes of determining compliance with maximum throughput limits, the applicant shall maintain certified daily and monthly records. The permittee shall maintain records of the coal throughput and the hours of operation. Compliance with the hourly throughput limit shall be demonstrated by dividing the calendar month's total throughput by the number of hours operated in the same calendar month to obtain an hourly average. By the fifteenth day of each calendar month, the permittee shall calculate the hourly averaged throughput of the previous calendar month. 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 for at least five (5) years and be made available to the Director of the Division of Air Quality or his or her duly authorized representative

upon request.

CHANGES TO CURRENT PERMIT R13-2306D

- Increase the size of existing raw coal stockpile 006 from 4.9 acres (213,444 ft<sup>2</sup>) base area and 250,000 tons capacity to 9.69 acres (422,096.4 ft<sup>2</sup>) base area and 750,000 tons capacity

RECOMMENDATION TO DIRECTOR

The information contained in this application for a Class II administrative update 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 Harrison County Coal Company to modify their existing wet wash coal preparation plant located near Shinnston, Harrison County, WV, is hereby recommended.



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

\_\_\_\_\_  
July 11, 2016

Date

# Increase in Emissions

DPR  
Harrison County Coal  
Harrison County Prep Pla

**G10 Emission Calculation Spreadsheet - Revised 3/27/12**

## EMISSIONS SUMMARY

Name of applicant: Consolidation Coal Co  
 Name of plant: R13-2306E-Robinson R 5/15

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

Uncontrolled PM		Controlled PM	
lb/hr	TPY	lb/hr	TPY

FUGITIVE EMISSIONS				
<i>Open Storage Pile Emissions</i>	1.25	5.48	0.63	2.74
<i>Unpaved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
<i>Paved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
<b>Fugitive Emissions Total</b>	<b>1.25</b>	<b>5.48</b>	<b>0.63</b>	<b>2.74</b>

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	0.00	0.00	0.00	0.00
<i>Transfer Point Emissions</i>	0.00	0.00	0.00	0.00
<b>Point Source Emissions Total*</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

\*Note: Point Source Total Controlled PM TPY emissions is used for 45CSR14 Major Source determination (see below)

<b>Facility Emissions Total</b>	<b>1.25</b>	<b>5.48</b>	<b>0.63</b>	<b>2.74</b>
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**\*Facility Potential to Emit (PTE) (Baseline Emissions) =** 0.00  
 (Based on Point Source Total controlled PM TPY emissions from above) ENTER ON LINE 26 OF APPLICATION

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

Uncontrolled PM-10		Controlled PM-10	
lb/hr	TPY	lb/hr	TPY

FUGITIVE EMISSIONS				
<i>Stockpile Emissions</i>	0.59	2.58	0.29	1.29
<i>Unpaved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
<i>Paved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
<b>Fugitive Emissions Total</b>	<b>0.59</b>	<b>2.58</b>	<b>0.29</b>	<b>1.29</b>

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	0.00	0.00	0.00	0.00
<i>Transfer Point Emissions</i>	0.00	0.00	0.00	0.00
<b>Point Source Emissions Total*</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

\*Note: Point Source Total Controlled PM-10 TPY emissions is used for 45CSR30 Major Source determination

<b>Facility Emissions Total</b>	<b>0.59</b>	<b>2.58</b>	<b>0.29</b>	<b>1.29</b>
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**3. WIND EROSION OF OPEN STORAGE PILES (including all raw coal, clean coal, refuse, etc.)**

P =	number of days per year with precipitation >0.01 inch	170
f =	percentage of time that the unobstructed wind speed exceeds 12 mph at the mean pile height	20

\*see Storage Piles tab

Source ID No.	Stockpile Description	Silt Content of Material %	Stockpile base area Max. sqft	Control Device ID Number	Control Efficiency %
	<b>OLD STOCKPILE SIZE</b>				
006	Raw Coal Stockpile	-5	213,444	MC	0
	<b>NEW STOCKPILE SIZE</b>				
006	Raw Coal Stockpile	5	422,096	MC	0

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

s =	silt content of road surface material (%)	10
P =	number of days per year with precipitation >0.01 inch	

\*see Unpaved Haulroads tab

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

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

sL =	road surface silt loading, (g/ft^2)	9
P =	number of days per year with precipitation >0.01 inch	

\*see Industrial Paved Haulroads tab

Item Number	Description	Mean Vehicle Weight (tons)	Miles per Round Trip	Maximum Trips Per Hour	Maximum Trips Per Year	Control Device ID Number	Control Efficiency %
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POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	0.00	0.00	0.00	0.00
<i>Transfer Point Emissions</i>	0.00	0.00	0.00	0.00
<b>Point Source Emissions Total*</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

\*Note: Point Source Total Controlled PM TPY emissions is used for 45CSR14 Major Source determination (see below)

<b>Facility Emissions Total</b>	<b>1.25</b>	<b>5.48</b>	<b>1.25</b>	<b>5.48</b>
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\*Note: Point Source Total Controlled PM-10 TPY emissions is used for 45CSR30 Major Source determination

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