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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.: G10-D164
Plant ID No.: 045-00149
Applicant: Greenbrier Minerals, LLC
Facility Name: Toney Fork Coal Screening Plant
Location: Lorado, Logan County, WV
SIC Codes: 1221 (Bituminous Coal & Lignite - Surface)
NAICS Codes: 212111 (Bituminous Coal and Lignite Surface Mining)
Application Type: Construction
Received Date: August 10, 2016
Engineer Assigned: Dan Roberts
Fee Amount: \$1,500
Date Received: August 11, 2016
Applicant's Ad Date: August 12, 2016
Newspaper: *Logan Banner*
Complete Date: October 11, 2016
UTM's: Easting: 436.25838 km Northing: 4185289.63 km NAD83 Zone 17N
Lat/Lon Coordinates: Latitude: 37.812778 Longitude: -81.724167 NAD83
Description: Application to construct a 600 TPH and 5,625,000 TPY raw coal screening plant consisting of one dump bin, one screen, five belt conveyors and three open storage piles.

BACKGROUND

Greenbrier Minerals, LLC is currently operating a raw coal surface mine called the Toney Fork Surface Mine near Lorado, Logan County, WV. Greenbrier Minerals, LLC has General Permit registration G60-C079 for an emergency generator at the same location using the same facility ID number.

Greenbrier Minerals, LLC is a subsidiary corporation of Coronado Coal, LLC.

DESCRIPTION OF PROCESS

The Toney Fork Surface Mine is located in a remote area of Buffalo Creek, Logan County, WV. The 2014 Powerscreen Warrior 1800 coal screening system will be used for direct-ship pit cleaned coal and may be moved and set up periodically to adjacent coal pits as material is uncovered.

The coal will be pit-cleaned and fed by front-end loader to the bin BS-01(PW) @ TP-01(UD-PW); BS-01 will transfer it to belt conveyor BC-01(NC) @ TP-02(TC-PE); coal from belt conveyor BC-01(NC) will transfer to screen SS-01(FE) @ (TP-09(TC-FE)). Screen material will then be sent to the under screen conveyor BC-02(FE) for distribution on any one of three belt conveyors BC-03(NC), BC-04(NC) or BC-05(NC) for transfer to the stockpiles OS-01(SW-WS), OS-02(SW-WS) or OS-03(SW-WS) @ TP-10(TC-PE through TP-15(TC-MDH)). Stockpiles will then be loaded to truck and delivered to the appropriate loadout for delivery @ TP-16(LO-MDH). The screen will be housed in a fully enclosed screen box as depicted in the attached brochure.

Greenbrier Minerals, LLC proposed to install a portable water tank for use with the partially enclosed top end-loader fed bin. The feed bin will be used for coal transfer only and not storage.

The facility shall be constructed and operated in accordance with the following equipment and control device information taken from registration application G10-D164 and any amendments thereto:

Equipment ID No.	Date of Construction, Reconstruction or Modification ¹	G10-D Applicable Sections ²	Emission Unit Description	Maximum Permitted Throughput		Control Device ³	Associated Transfer Points		
				TPH	TPY		Location: B -Before A -After	ID No.	Control Device ³
Raw Coal Screening Plant									
BS-01	C 2016	5 and 8	Front-end Loader Feed Bin - 20 tons capacity - receives raw pit-cleaned raw coal from a front-end loader and feeds in onto BC-01	600	5,625,000	PW	B A	TP-01 TP-02	UD-PW TC-FE
BC-01	C 2016	5 and 8	Belt Conveyor - receives raw coal from the BS-01 and transfers it to SS-01	600	5,625,000	NC	B A	TP-02 TP-03	TC-FE TC-FE
SS-01	C 2016	5 and 8	Double Deck Screen - receives raw coal from BC-01, sizes it and drops onto BC-02	600	5,625,000	FE	B A	TP-03 TP-04	TC-FE TC-FE
BC-02	C 2016	5 and 8	Belt Conveyor - receives the sized raw coal from SS-01 and transfers it to BC-03, BC-04 or BC-05	600	5,625,000	NC	B A A A	TP-04 TP-05 TP-08 TP-11	TC-FE TC-FE TC-FE TC-FE
BC-03	C 2016	5 and 8	Belt Conveyor - receives the sized raw coal from BC-02 and transfers it to OS-01	600	5,625,000	NC	B A	TP-05 TP-06	TC-FE TC-MDH
OS-01	C 2016	5 and 8	Sized Raw Coal Open Storage Pile - maximum 5,000 tons capacity, 8,869 ft ² base area and 20' height - receives sized raw coal from BC-03, stores it and then a front-end loader transfers it to trucks for shipment.	600	5,625,000	WS	B A	TP-06 TP-07	TC-MDH LO-MDH
BC-04	C 2016	5 and 8	Belt Conveyor - receives the sized raw coal from BC-02 and transfers it to OS-02	600	5,625,000	PE	B A	TP-08 TP-09	TC-FE TC-MDH

Equipment ID No.	Date of Construction, Reconstruction or Modification ¹	G10-D Applicable Sections ²	Emission Unit Description	Maximum Permitted Throughput		Control Device ³	Associated Transfer Points		
				TPH	TPY		Location: B -Before A -After	ID No.	Control Device ³
OS-02	C 2016	5 and 8	Sized Raw Coal Open Storage Pile - maximum 5,000 tons capacity, 8,869 ft ² base area and 20' height - receives sized raw coal from BC-04, stores it and then a front-end loader transfers it to trucks for shipment.	600	5,625,000	WS	B A	TP-09 TP-10	TC-MDH LO-MDH
BC-05	C 2016	5 and 8	Belt Conveyor - receives the sized raw coal from BC-02 and transfers it to OS-03	600	5,625,000	PE	B A	TP-11 TP-12	TC-FE TC-MDH
OS-03	C 2016	5 and 8	Sized Raw Coal Open Storage Pile - maximum 5,000 tons capacity, 8,869 ft ² base area and 20' height - receives sized raw coal from BC-05, stores it and then a front-end loader transfers it to trucks for shipment	600	5,625,000	WS	B A	TP-12 TP-13	TC-MDH LO-MDH

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 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; MDH - Minimize Drop Height; and NC - No Control.

Reciprocating Internal Combustion Engines (R.I.C.E.) Information

Emission Unit ID No.	Emission Unit Description (Make, Model, Serial No., etc.)	Year Manufactured	Year Installed	Design Capacity (Bhp/rpm)
E1	Cat 4.4 Serial No. 44806883	2014	2016	111 bhp / 2,200 rpm

Emission Unit ID No.	Subject to 40CFR60 Subpart IIII?	Subject to 40CFR60 Subpart JJJJ?	Subject to Sections 9.1.4/9.2.1 (Catalytic Reduction Device)
E1	Yes	No	No

Storage Tanks

Source ID No.	Status	Content	Design Capacity			Orientation	Liquid Height
			Volume	Diameter	Throughput		
T1	Existing	Diesel	1,000 gal	4'	8,000 gal	HORZ	

DESCRIPTION OF FUGITIVE EMISSIONS (taken directly from the application)

Potential sources of fugitive particulate emissions for this facility include emissions, which are not captured by pollution control equipment and emissions from open stockpiles and vehicular traffic on paved and unpaved haulroads and work areas. The haulroads and work areas will be controlled by water truck in accordance with section E.6.c.i. the General Permit. The stockpile areas will be controlled by water truck with pressurized pumps sufficient to control emissions. The water truck will be operated three times daily, and more as needed in dry periods.

An additive to prevent freezing will be utilized in the winter months when freezing conditions are present. New course rock base material will be added to unpaved haulroads as needed.

SITE INSPECTION

A site inspection was not performed at this time due to the location proposed and the size and scope of the proposed facility. However, after construction is completed, the facility will be inspected by the DAQ's Compliance and Enforcement Section on a regular schedule.

Directions to the facility from Charleston are to take US-119 S and travel 27.5 miles, turn right onto Smoot Avenue and travel 1.7 miles, Smoot Avenue becomes WV-17 and travel 21.2 miles, turn left onto County Highway-15/Kelly Hollow Road and continue to follow County Highway-15 for 8.1 miles, turn right onto Kelly Mount Rum Creek Road and travel 0.1 miles, stay straight to go onto County Highway-14/Kelly Mount Rum Creek Road and travel 2.4 miles, turn left onto Buffalo Creek Road/County Highway-16 and travel approximately 7 miles passing Lorado, WV and to Pardee, WV, turn left onto CR-16/3 and travel 0.1 miles and then turn left onto Meredith Branch Road and travel the road to the top of the hill where the surface mine is found.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Fugitive emission calculations for continuous and batch drop operations, transfer points, crushing and screening, storage piles, and paved and unpaved haulroads are based on AP-42 Fifth Edition "Compilation of Air Pollution Emission Factors", Volume 1. Control efficiencies were applied based on "Calculation of Particulate Matter Emission - Coal Preparation Plants and Material Handling Operations." The emission factors for crushing/breaking and screening operations were obtained from the Air Pollution Engineering Manual - Air & Waste Management Association - June 1992. The calculations were performed by the applicant's consultant using the DAQ's G10-C Excel Emission Calculation Spreadsheet and were checked for accuracy and completeness by the writer.

The Powerscreen Warrior 1800 will be powered by a Caterpillar C4.4 4 cylinder diesel engine labeled E1 and rated for 111 hp (82 kW) at 2,200 rpm. Engine E1 is a 4 stroke diesel and is EPA Tier 4i / Stage 3B. Engine E1 shall not exceed 500 hours of operation per year.

The maximum permitted emission rates for Engine E1 shall not exceed the following based on a maximum of 500 hours of operation per year:

Pollutant	Emission Factor (lb/hp-hr) ¹	Engine E1	
		Hourly Emissions (lb/hour)	Annual Emissions (TPY)
NO _x	0.03100	3.44	0.86
CO	0.00668	0.74	0.19
VOC	0.00247	0.27	0.07
SO ₂	0.00205	0.23	0.06
PM ₁₀	0.00220	0.24	0.06
Total HAP	various ²	0.0071	0.0018

¹ Emission factors were taken from AP 42, Fifth Edition, Volume I, Chapter 3: Stationary Internal Combustion Sources, Section 3: Gasoline and Diesel Industrial Engines (10/96), Table 3.3-1. Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines.

² Emission factors were taken from AP 42, Fifth Edition, Volume I, Chapter 3: Stationary Internal Combustion Sources, Section 3: Gasoline and Diesel Industrial Engines (10/96), Table 3.3-2. Speciated Organic Compound Emission Factors for Uncontrolled Diesel Engines.

The proposed construction will result in the potential to discharge controlled particulate matter emissions of 124.94 pounds per hour (PPH) and 547.42 tons per year (TPY) of particulate matter (PM), of which 39.29 PPH and 171.43 TPY will be particulate matter less than 10 microns in diameter (PM₁₀). Refer to the following table for a complete summary of the proposed raw coal screening plant's potential to discharge:

- Proposed Emissions - Greenbrier Minerals, LLC Toney Fork Coal Screening Plant G10-D164	Controlled PM Emissions		Controlled PM₁₀ Emissions	
	lb/hour	TPY	lb/hour	TPY
Fugitive Emissions				
Open Storage Pile Emissions	0.04	0.19	0.02	0.09
Unpaved Haulroad Emissions	108.14	474.84	31.25	137.23
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
<i>Fugitive Emissions Total</i>	<i>108.18</i>	<i>475.02</i>	<i>31.27</i>	<i>137.32</i>
Point Source Emissions				
Equipment Emissions	12.00	52.56	5.64	24.70
Transfer Point Emissions	4.51	19.77	2.14	9.35
Engine E1	0.24	0.06	0.24	0.06
<i>Point Source Emissions Total (PTE)</i>	<i>16.75</i>	<i>72.39</i>	<i>8.02</i>	<i>34.12</i>
FACILITY EMISSIONS TOTAL	124.94	547.42	39.29	171.43

REGULATORY APPLICABILITY

NESHAPS and PSD have no applicability to the proposed raw coal screening plant. The construction of Greenbrier Minerals, LLC's proposed raw coal screening 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 proposed raw coal screening plant will be 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 construction of the proposed raw coal screening plant is subject to the requirements of 45CSR13 because it will result in a potential to discharge greater than six pounds per hour and ten tons per year of regulated air pollutant (PM and PM₁₀) and involve the construction of one dump bin, one screen, five belt conveyors and three open storage piles, which are defined as affected facilities and subject to 40 CFR 60 NSPS Subpart Y, and one diesel engine, which is subject to 40 CFR 60 Subpart IIII. The applicant has submitted an application for a General Permit registration to construct. The applicant published a Class I legal advertisement in the *Logan Banner* on August 12, 2016 and submitted \$500 for the General Permit application fee and \$1,000 for the NSPS fee.

45CSR16 Standards of Performance for New Stationary Sources

40 CFR 60 Subpart Y: Standards of Performance for Coal Preparation and Processing Plants

This proposed raw coal screening plant will be subject to 40 CFR 60 Subpart Y because it will be constructed after October 24, 1974 and will process more than 200 tons of coal per day. The proposed construction will include one dump bin, one screen, five belt conveyors and two open storage piles, which are defined as affected facilities in 40 CFR 60 Subpart Y.

Therefore, the proposed construction 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(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.

45CSR16 Standards of Performance for New Stationary Sources

40 CFR 60 Subpart III: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

The provisions of Subpart III are applicable to owners and operators of stationary compression ignition (CI) internal combustion engines (ICE) which are manufactured after April 1, 2006, are not fire pump engines and commence construction after July 11, 2005. For the purposes of Subpart III, the date that construction commences is the date the engine is ordered by the owner or operator.

Powerscreen Warrior 1800 will be powered by a Caterpillar C4.4 4 cylinder diesel engine labeled E1 and rated for 111 hp (82 kW) at 2,200 rpm. Engine E1 is a 4 stroke diesel and is EPA Tier 4i / Stage 3B certified. Engine E1 shall not exceed 500 hours of operation per year. In accordance with § 60.4200 (2), this engine is subject to Subpart III because it was manufactured after April 1, 2006 and commenced construction after July 11, 2005.

In accordance with § 60.4207(b), “Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.”

40 CFR 89 Control of Emissions From New and In-use Nonroad Compression-Ignition Engines

This part applies to all compression-ignition nonroad engines except those specified in paragraph (b) of this section. This means that the engines for which this part applies include but are not limited to compression-ignition engines exempted from the requirements of 40 CFR Part 92 by 40 CFR 92.207 or 40 CFR Part 94 by 40 CFR 94.907. This part applies as specified in 40 CFR part 60 subpart III, to compression-ignition engines subject to the standards of 40 CFR part 60, subpart III.

45CSR30 Requirements for Operating Permits

In accordance with 45CSR30 Major Source Determination, the proposed raw coal screening plant is not listed in 45CSR30 subsection 2.26.b as one of the categories of stationary sources which must include fugitive emissions (open storage piles constructed or modified on or before May 27, 2009 and haulroads) when determining whether it is a major stationary source for the purposes of § 302(j) of the Clean Air Act. The proposed raw coal screening plant’s potential to emit will be 34.21 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 proposed raw coal screening plant will be a nonmajor source subject to 45CSR30. The proposed raw coal screening plant will not subject to the permitting requirements of 45CSR30 and will be classified as a deferred source.

The proposed construction of Greenbrier Minerals, LLC’s raw coal screening facility 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 proposed raw coal screening plant is not one of the 100 TPY stationary sources listed under the definition of “Major Stationary Source” in subsection 2.43.a. Therefore, it must have the potential to emit 250 TPY or more of any regulated pollutant to meet the definition of a major source in subsection 2.43.b. At the end of subsection 2.4.3, this facility is not listed in Table 1 - Source Categories Which Must Include Fugitive Emissions. So, fugitive emissions (from open storage piles constructed or modified on or before May 27, 2009 and haulroads) are not included when determining major stationary source applicability. The proposed raw coal screening plant’s potential to emit will be 72.58 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 raw coal screening plant and existing wet wash coal preparation plant are not subject to the requirements set forth within 45CSR14.

40 CFR 63 Subpart ZZZZ: National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

According to the RICE NESHAP Summary of Requirements, new and reconstructed stationary non-emergency compression ignition engine constructed on or after June 12, 2006 and located at an area source of HAP are subject to 40 CFR part 60, subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines).

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.

Other than PM (particulate matter) and PM₁₀ (particulate matter less than 10 microns in diameter), which are non-toxic pollutants, the only non criteria regulated pollutants that are addressed by this permit application are the very small amount of Hazardous Air Pollutants that are the normal byproduct of diesel combustion.

Acetaldehyde:

Acetaldehyde is mainly used as an intermediate in the synthesis of other chemicals. It is ubiquitous in the environment and may be formed in the body from the breakdown of ethanol. Acute (short-term) exposure to acetaldehyde results in effects including irritation of the eyes, skin, and respiratory tract. Symptoms of chronic (long-term) intoxication of acetaldehyde resemble those of alcoholism. Acetaldehyde is considered a probable human carcinogen (Group B2) based on inadequate human cancer studies and animal studies that have shown nasal tumors in rats and laryngeal tumors in

hamsters.

Acrolein:

Acrolein is primarily used as an intermediate in the synthesis of acrylic acid and as a biocide. It may be formed from the breakdown of certain pollutants in outdoor air or from the burning of organic matter including tobacco, or fuels such as gasoline or oil. It is toxic to humans following inhalation, oral or dermal exposures. Acute (short-term) inhalation exposure may result in upper respiratory tract irritation and congestion. No information is available on its reproductive, developmental, or carcinogenic effects in humans, and the existing animal cancer data are considered inadequate to make a determination that acrolein is carcinogenic to humans.

Benzene:

Benzene is found in the air from emissions from burning coal and oil, gasoline service stations, and motor vehicle exhaust. Acute (short-term) inhalation exposure of humans to benzene may cause drowsiness, dizziness, headaches, as well as eye, skin, and respiratory tract irritation, and, at high levels, unconsciousness. Chronic (long-term) inhalation exposure has caused various disorders in the blood, including reduced numbers of red blood cells and aplastic anemia, in occupational settings. Reproductive effects have been reported for women exposed by inhalation to high levels, and adverse effects on the developing fetus have been observed in animal tests. Increased incidence of leukemia (cancer of the tissues that form white blood cells) have been observed in humans occupationally exposed to benzene. EPA has classified benzene as a Group A, human carcinogen.

Formaldehyde:

Formaldehyde is used mainly to produce resins used in particle board products and as an intermediate in the synthesis of other chemicals. Exposure to formaldehyde may occur by breathing contaminated indoor air, tobacco smoke, or ambient urban air. Acute (short-term) and chronic (long-term) inhalation exposure to formaldehyde in humans can result in respiratory symptoms, and eye, nose, and throat irritation. Limited human studies have reported an association between formaldehyde exposure and lung and nasopharyngeal cancer. Animal inhalation studies have reported an increased incidence of nasal squamous cell cancer. EPA considers formaldehyde a probable human carcinogen (Group B1).

Naphthalene:

Naphthalene is used in the production of phthalic anhydride; it is also used in mothballs. Acute (short-term) exposure of humans to naphthalene by inhalation, ingestion, and dermal contact is associated with hemolytic anemia, damage to the liver, and neurological damage. Cataracts have also been reported in workers acutely exposed to naphthalene by inhalation and ingestion. Chronic (long-term) exposure of workers and rodents to naphthalene has been reported to cause cataracts and damage to the retina. Hemolytic anemia has been reported in infants born to mothers who "sniffed" and ingested naphthalene (as mothballs) during pregnancy. Available data are inadequate to establish a causal relationship between exposure to naphthalene and cancer in humans. EPA has classified naphthalene as a Group C, possible human carcinogen.

Toluene:

The acute toxicity of toluene is low. Toluene may cause eye, skin, and respiratory tract irritation. Short-term exposure to high concentrations of toluene (e.g., 600 ppm) may produce fatigue,

dizziness, headaches, loss of coordination, nausea, and stupor; 10,000 ppm may cause death from respiratory failure. Ingestion of toluene may cause nausea and vomiting and central nervous system depression. Contact of liquid toluene with the eyes causes temporary irritation. Toluene is a skin irritant and may cause redness and pain when trapped beneath clothing or shoes; prolonged or repeated contact with toluene may result in dry and cracked skin. Because of its odor and irritant effects, toluene is regarded as having good warning properties. The chronic effects of exposure to toluene are much less severe than those of benzene. No carcinogenic effects were reported in animal studies. Equivocal results were obtained in studies to determine developmental effects in animals. Toluene was not observed to be mutagenic in standard studies.

Xylene:

Commercial or mixed xylene usually contains about 40-65% m-xylene and up to 20% each of o-xylene and p-xylene and ethyl benzene. Xylenes are released into the atmosphere as fugitive emissions from industrial sources, from auto exhaust, and through volatilization from their use as solvents. Acute (short-term) inhalation exposure to mixed xylenes in humans results in irritation of the eyes, nose, and throat, gastrointestinal effects, eye irritation, and neurological effects. Chronic (long-term) inhalation exposure of humans to mixed xylenes results primarily in central nervous system (CNS) effects, such as headache, dizziness, fatigue, tremors, and incoordination; respiratory, cardiovascular, and kidney effects have also been reported. EPA has classified mixed xylenes as a Group D, not classifiable as to human carcinogenicity.

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 construction. This raw coal screening plant will be located in Logan County, WV, which is currently in attainment for PM (particulate matter) and PM₁₀ (particulate matter less than 10 microns in diameter). This proposed raw coal screening plant will be a minor source as defined by 45CSR14, therefore, an air quality impact analysis is not required.

GENERAL PERMIT ELIGIBILITY

The proposed construction 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 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 general permit registration 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 Greenbrier Minerals, LLC for the construction of their proposed coal screening plant to be located near Lorado, Logan County, WV is hereby recommended.



Daniel P. Roberts, Engineer Trainee
NSR Permitting Section

October 12, 2016

Date