



**west virginia** department of environmental protection

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**ENGINEERING EVALUATION / FACT SHEET**

BACKGROUND INFORMATION

Application No.: R13-1654G  
Plant ID No.: 039-00063  
Applicant: Kanawha River Terminals, LLC  
Facility Name: Quincy Dock Facility  
Location: Belle, Kanawha County  
SIC Code: 1221 (Bituminous Coal & Lignite - Surface)  
NAICS Code: 212111 (Bituminous Coal and Lignite Surface Mining)  
Application Type: Class II Administrative Update  
Received Date: December 9, 2016  
Engineer Assigned: Dan Roberts  
Fee Amount: \$300  
Date Received: December 29, 2016  
Applicant Ad Date: December 19, 2016  
Newspaper: *Logan Banner*  
Complete Date: January 13, 2016  
UTM Coordinates: Easting: 456.1 km • Northing: 4227.9 km • NAD83 Zone 17N  
Lat/Lon Coordinates: Latitude: 38.197976 • Longitude: -81501365 • NAD83  
Description: Modification to increase the maximum hourly throughput of the railcar loadout system from 3,500 TPH to 6,000 TPH. This will affect open storage pile OS-05, belt conveyor BC-24, weigh bin BS-08 and railcar loadout bin BS-09 and related transfer points TP51, TP52, TP53 and TP54.

BACKGROUND

Kanawha River Terminals, LLC (“KRT”) is the owner and operator of their Quincy Dock Facility currently operating under modification permit R13-1654G approved on July 3, 2013.

The reason for application R13-1654H is to increase the maximum hourly throughput of the railcar loadout system from 3,500 TPH to 6,000 TPH. This will affect open storage pile OS-05, belt conveyor BC-24, weigh bin BS-08 and railcar loadout bin BS-09.

## DESCRIPTION OF PROCESS

Coal can be received by the Kanawha River Terminals, LLC's Quincy Dock Facility via rail, barge, and truck delivery.

Raw or clean coal can be dumped at the proposed rail dump BS-01(FW) @ TP-01(UD-FW) and transferred to stockpile via belt conveyors BC-01(FE) and BC-02(FE) @ TP-02(TC-FE) thru TP-04(TC-MDH). Coal received by barge is transferred to a partially-enclosed top-fed bin BS-02(PW) @ TP-05(UD-MDH) and transferred to open stockpile OS-02(SW-WS) via belt conveyor BC-03(PE) and BC-04(PE) @ TP-06(TC-FE) thru TP-08(TC-MDH).

Coal from various stockpiles can be processed by the 250TPH stoker (small) crushing/screening plant located west of the barge loadout facility. Material is fed by front-end loader @ TP-09(UD-MDH) to top-fed bin BS-03(PW); transferred to a fully-enclosed with water primary Hammermill crusher CR-01(FW) via belt conveyor BC-05(PE) @ TP-10(TC-FE) and TP-11(TC-FE); and the crushed coal can be transferred to stockpile OS-03(SW-WS) via a series of partially-enclosed belt conveyors BC-06(PE) thru BC-08(PE) @ TP-12(TC-FW) thru TP-15(TC-MDH); or to a partially-enclosed with water 250TPH double deck screen SS-01(PW) @ TP-16(TC-PW). The screened material can then be transferred to stockpile OS-04(SW-WS) via two partially-enclosed belt conveyors BC-09(PE) and BC-10(PE) @ TP-17(TC-FW) thru TP-19(TC-MDH).

Coal to be screened (large stoker plant) from open stockpile OS-01(SW-WS) can be transferred by end loader to a top-fed partially enclosed bin BS-04(PW) @ TP-20(UD-MDH); to partially-enclosed belt BC-11(PE) @ TP-21(TC-FE); to an 800TPH primary crusher(FW) @ TP-22(TC-FE); to partially enclosed belt BC-12(PE) @ TP-23(TC-FW); to a partially enclosed w/water 800TPH double deck screen SS-02(PW) @ TP-24(TC-PW); to belt BC-13(PE) @ TP-25(TC-FE); and back to open stockpile OS-01 @ TP-26(TC-MDH).

Coal can also be transferred from OS-01 to a partially enclosed top-fed bin BS-05(PW) @ TP-29(UD-MDH); to belt BC-15(PE) @ TP-30(TC-FE); to a fully enclosed w/water 500TPH crusher CR-03(FW) @ TP-31(TC-FE); to belt BC-16(PE) @ TP-32(TC-FW); to belt BC-17(PE) @ TP-33(TC-FE); and to open stockpile OS-01 @ TP-34(TC-MDH).

Coal can be sent to barge thru the river belt via top-fed bin BS-07(PW) @ TP-39(UD-MDH); to river belt BC-19(PE) @ TP-40(TC-FE) and to the crusher/screening building @ TP-41(TC-FE). Or, coal can be transferred from OS-01 to to-fed bin BS-06(PW) @ TP-36(UD-MDH); to belt BC-18(PE) @ TP-37(TC-FE); to the crusher and screening building @ TP-38(TC-FE). The river fed or direct loadout coal transfers to a fully-enclosed w/water screen SS-03(FW) @ TP-42(TC-FW); to crusher CR-04 or bypass @ TP-43(TC-FW); to loadout transfer belt BC-20(PE) @ TP-44(TC-FE); to loadout belt BC-21(PE) @ TP-45(TC-FE); to barge via hydraulic chute @ TP-46(LO-TC).

At the proposed rail loadout system, stockpiled materials will be fed by front-end loader to two partially enclosed bins BS-10 (PW) and BS-11 (PW) with water sprays @ TP-47(UD-PW) and TP-57(UD-PW); then to belt conveyor BC-22(PE) @ TP-47(LO-UC); to a 2000TPH double roll crusher CR-05(FW) @ TP-48(TC-FE); to stockpile feed belt BC-23(PE) @ TP-49(TC-FW); to stockpile OS-05(SW-WS) via stacking tube @ TP-50(TC-PE); to loadout belt BC-24(PE) via underground feeders @ TP-50(LO-UC); to rail surge bin BS-08(FE) @ TP-52(TC-FE); to loadout

bin BS-09(FE) @ TP-53(TC-FE); to railcar @ TP-54(LR-TC).

Material trucked to facility is unloaded to stockpile area OS-01(SW-WS) @ TP-35(UL-MDH). Material to be trucked from the facility is loaded by front-end loader @ TP-55(LO-MDH).

There are no VOCs or HAPs associated with the Quincy Facility.

The facility shall be modified and operated in accordance with the following equipment and control device information taken from permit applications R13-1654H, R13-1654G, R13-1654F, R13-1654E, R13-1654D, R13-1654C, R13-1654B, R13-1654A and R13-1654 and any amendments thereto:

Equipment ID #	Date of Construction, Reconstruction or Modification <sup>1</sup>	Emission Unit Description	Design Capacity		Control Device(s) <sup>2</sup>
			lb/hour	TPY	
<b>Coal Delivery - Trucks, Rail and Barge</b>					
BS-01	C 2010	Rail Dump Bin - 400 tons - receives coal from rail cars and then drops it to BC-01	2,000	8,760,000	FW
BC-01	Proposed 2010 - Not yet Constructed	Belt Conveyor - 60" x 100' - receives coal from BS-01 and transfers it to BC-02	2,000	8,760,000	FE
BC-02	Proposed 2010 - Not yet Constructed	Belt Conveyor - 60" x 125' - receives coal from BC-01 and transfers it to OS-01	2,000	8,760,000	PE
OS-01	M 2010 C 1999	Coal Open Storage Pile - 350,000 tons / 880,869 ft <sup>2</sup> base area - receives coal from trucks (max. of 10,000,000 TPY), BC-02, BC14 and BC-17, stores it and then an endloader transfers it to BS-03, BS-04 or BS-05 to be sized; BS-06 or BS-07 to be shipped by barge; or to trucks for shipment (max. of 2,000,000 TPY) or front-end loaders to BS-10 or BS-11	2,000	10,000,000	WS
BS-02	M 2010 C 1999	Top Fed Barge Unloading Bin - 50 tons - receives coal from a clam shell barge loadout and then drops it to BC-03	500	4,380,000	PW
BC-03	M 2010 C 1999	Belt Conveyor - 48" x 125' - receives coal from BS-02 and transfers it to BC-04	500	4,380,000	PE
BC-04	M 2010 C 1999	Belt Conveyor - 48" x 150' - receives coal from BC-03 and transfers it to OS-02	500	4,380,000	PE
OS-02	C 2010	Coal Open Storage Pile - 5,000 tons / 8,869 ft <sup>2</sup> base area - receives coal from BC-04, stores it and then an endloader transfers it to BS-07	500 In	4,380,000	WS
<b>Existing 250 TPH Stoker Plant</b>					
BS-03	M 2010 C 1999	Top Fed Endloader Bin - 100 tons - receives coal from OS-01 via an endloader and then feeds it to BC-05	250	2,190,000	PW
BC-05	M 2010 C 1999	Belt Conveyor - 48" x 20' - receives coal from BS-03 and transfers it to CR-01	250	2,190,000	PE
CR-01	M 2010 C 1999	Hammermill Crusher - receives coal from BC-05, crushes it to 4" x 0" and drops it to BC-06	250	2,190,000	FW
BC-06	M 2010 C 1999	Belt Conveyor - 48" x 45' - receives coal from CR-01 and transfers it to SS-01	250	2,190,000	PE
SS-01	M 2010 C 1999	Double Deck 8' x 16' Screen - receives coal from BC-06, screens it and the oversized 2" x 0 coal drops to BC-07 while the undersize -1 3/8" coal drops to BC-09	250	2,190,000	PW
BC-07	M 2010 C 1999	Belt Conveyor - 48" x 14' - receives coal from SS-01 and transfers it to BC-08	250	2,190,000	PE
BC-08	M 2010 C 1999	Belt Conveyor - 48" x 60' - receives coal from BC-07 and transfers it to OS-03	250	2,190,000	PE
OS-03	M 2010 C 1999	Coal Open Storage Pile - 15,000 tons / 28,869 ft <sup>2</sup> base area - receives coal from BC-08, stores it and then an endloader transfers it to BS-06	250 In	2,190,000	WS

Equipment ID #	Date of Construction, Reconstruction or Modification <sup>1</sup>	Emission Unit Description	Design Capacity		Control Device(s) <sup>2</sup>
			lb/hour	TPY	
BC-09	M 2010 C 1999	Belt Conveyor - 48" x 25' - receives coal from SS-01 and transfers it to BC-10	250	2,190,000	PE
BC-10	M 2010 C 1999	Belt Conveyor - 48" x 100' - receives coal from BC-09 and transfers it to OS-04	250	2,190,000	PE
OS-04	M 2010 C 1999	Coal Open Storage Pile - 15,000 tons / 28,869 ft <sup>2</sup> base area - receives coal from BC-10, stores it and then an endloader transfers it to BS-06	250 ln	2,190,000	WS
<b>Proposed 800 TPH Stoker Plant</b>					
BS-04	M 2010 C 1999	Top Fed Endloader Bin - 100 tons - receives coal from OS-01 via an endloader and then feeds it to BC-11	800	7,008,000	PW
BC-11	M 2010 C 1999	Belt Conveyor - 48" x 75' - receives coal from BS-04 and transfers it to CR-02	800	7,008,000	PE
CR-02	M 2010 C 1999	Hammermill Crusher - receives coal from BC-11, crushes it to 4" x 0" and drops it to BC-12	800	7,008,000	FW
BC-12	Proposed 2010 - Not yet Constructed	Belt Conveyor - 48" x 100' - receives coal from CR-02 and transfers it to SS-02	800	7,008,000	PE
SS-02	Proposed 2010 - Not yet Constructed	Double Deck 8' x 20' Screen - receives coal from BC-12, screens it and the oversized 2" x 0 coal drops to BC-13 while the undersize -1 3/8" coal drops to BC-14	800	7,008,000	PW
BC-13	Proposed 2010 - Not yet Constructed	Belt Conveyor - 48" x 150' - receives coal from SS-02 and transfers it to OS-01 (see Coal Delivery above)	800	7,008,000	PE
BC-14	Proposed 2010 - Not yet Constructed	Belt Conveyor - 48" x 150' - receives coal from SS-02 and transfers it to OS-01 (see Coal Delivery above)	800	7,008,000	PE
<b>Clean Coal Crushing</b>					
BS-05	M 2010 C 1999	Top Fed Endloader Bin - 100 tons - receives coal from OS-01 via an endloader and then feeds it to BC-15	500	7,008,000	PW
BC-15	M 2010 C 1999	Belt Conveyor - 48" x 75' - receives coal from BS-05 and transfers it to CR-03	500	4,380,000	PE
CR-03	M 2010 C 1999	Hammermill Crusher - receives coal from BC-15, crushes it to 4" x 0" and drops it to BC-16	500	4,380,000	FW
BC-16	Proposed 2010 - Not yet Constructed	Belt Conveyor - 48" x 75' - receives coal from CR-03 and transfers it to BC-17	500	4,380,000	PE
BC-17	Proposed 2010 - Not yet Constructed	Belt Conveyor - 48" x 150' - receives coal from BC-16 and transfers it to OS-01 (see Coal Delivery above)	500	4,380,000	PE
<b>Barge Loadout</b>					
BS-06	M 2010 C 1999	Top Fed Endloader Bin - 200 tons - receives coal from OS-01, OS-03 and OS-04 via an endloader and then feeds it to BC-18	1,800	10,000,000	PW
BC-18	M 2010 C 1999	Belt Conveyor - 60" x 88' - receives coal from BS-06 and transfers it to SS-03	1,800	10,000,000	PE
BS-07	M 2010 C 1999	Top Fed Endloader Bin - 100 tons - receives coal from OS-01 and OS-02 via an endloader and then feeds it to BC-19	1,800	10,000,000	PW
BC-19	M 2010 C 1999	Belt Conveyor - 48" x 650' - receives coal from BS-07 and transfers it to SS-03 or BC-20 via a bypass chute	1,800	10,000,000	PE
SS-03	M 2010 C 1999	Double Deck Screen - receives coal from BC-18 and BC-19, screens it and oversize coal drops to CR-04 and the sized coal drops to BC-20	1,800	10,000,000	FW
CR-04	M 2010 C 1999	Hammermill Crusher - receives oversize coal from SS-03, crushes it to 4" x 0" and drops it to BC-20	1,800	10,000,000	FW
BC-20	M 2010 C 1999	Belt Conveyor - 72" x 25' - receives coal from BC-19 via a bypass chute, SS-03 and CR-04 and transfers it to BC-21	2,500	10,000,000	PE
BC-21	M 2010 C 1999	Belt Conveyor - 72" x 105' - receives coal from BC-20 and transfers it to barge through a hydraulic chute	2,500	10,000,000	PE
<b>Rail Loadout</b>					

Equipment ID #	Date of Construction, Reconstruction or Modification <sup>1</sup>	Emission Unit Description	Design Capacity		Control Device(s) <sup>2</sup>
			lb/hour	TPY	
BS-10	C 2012	Top Fed Endloader Bin - 100 tons - receives coal from OS-01 via an endloader and then feeds it to BC-22	2,000	5,000,000	PW
BS-11	C 2012	Top Fed Endloader Bin - 100 tons - receives coal from OS-01 via an endloader and then feeds it to BC-22	2,000	5,000,000	PW
BC-22	C 2010	Belt Conveyor - 60" x 350' - receives coal from BS-10 and BS-11 and transfers it to CR-05	2,000	10,000,000	PE
CR-05	C 2012	Hammermill Crusher - receives coal from BC-22, crushes it to 4" x 0" and drops it to BC-23	2,000	10,000,000	FW
BC-23	C 2010	Belt Conveyor - 60" x 400' - receives crushed coal from CR-05 and transfers it to OS-05	2,000	10,000,000	PE
OS-05	M 2016 C 2010	Coal Open Storage Pile with a Stacking Tube - 25,000 tons / 38,869 ft <sup>2</sup> base area - receives coal from BC-23, stores it and then underground feeders feed it to BC-24	2,000 In 6,000 Out	10,000,000	ST, WS
BC-24	M 2016 C 2012	Belt Conveyor - 72" x 680' - receives coal from OS-05 via underground feeders and transfers it to BS-08 or BS-09	6,000	10,000,000	PE
BS-08	M 2016 C 2010	Surge Bin - 420 tons - receives coal from BC-24 and then drops it to BS-09	6,000	10,000,000	FE
BS-09	M 2016 C 2010	Rail Loadout Bin - 220 tons - receives coal from BS-08 and then loads it to rail cars	6,000	10,000,000	FE

<sup>1</sup> In accordance with 40 CFR 60 Subpart Y, coal processing and conveying equipment, coal storage systems, and coal transfer and loading systems constructed, reconstructed, or modified after April 28, 2008 shall not discharge gases which exhibit 10 percent opacity or greater. For open storage piles constructed, reconstructed, or modified after May 27, 2009, the permittee shall prepare and operate in accordance with a fugitive coal dust emissions control plan that is appropriate for site conditions.

<sup>2</sup> Control Device Abbreviations: FE - Full Enclosure; FW - Full Enclosure with Water Sprays; PE - Partial Enclosure; PW - Partial Enclosure with Water Sprays; WS - Water Sprays; ST - Stacking Tube; and N - None.

## DESCRIPTION OF FUGITIVE EMISSIONS

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 haulroads and unpaved work areas. The haulroads will be controlled by a series of mounted water sprays and on-site water truck. The water truck is sufficiently equipped with pumps and sprays to control the haulroad emissions and will be operated three times a day, more as needed during dry periods. Stockpile and work area emissions are controlled by rainbirds located around the perimeter of the facility and are operated on a time delay. A wheel truck wash is located near the exit of the facility.

The crushers and screens are either fully enclosed or partially enclosed with water, belt conveyors are at least partially enclosed and, with the exception of the belt conveyor transfers to stockpile, all transfer points are fully enclosed.

A PM-10 monitor is in place with reporting to the Division of Air Quality, as specified in the existing permit.

An additive to prevent freezing will be utilized in the winter months when freezing conditions are present.

SITE INSPECTION

On September 22, 2016, Mike Kolb of the DAQ’s Compliance and Enforcement Section performed a full on-site targeted inspection. Mr. Kolb had no notes entered from the inspection. The facility was found to be in compliance and given a Status Code of 30: In Compliance.

Directions to the facility from Charleston are to follow I-64 East, take Exit 96 and then take U. S. Route 60 East, and travel to Quincy. At the Quincy Shopping Plaza, turn right at the light beside Shoney’s and travel approximately 0.1 miles and turn left. Go under the railroad crossing and the facility is 0.1 miles straight ahead.

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 emission 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 emission 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 potential to discharge controlled emissions of 1.67 pounds per hour (lb/hr) and zero tons per year (TPY) of particulate matter (PM), of which 0.79 lb/hr and zero TPY will be particulate matter less than 10 microns in diameter (PM<sub>10</sub>). Refer to the following table for a summary of the proposed increase in the potential to discharge controlled emissions of PM and PM<sub>10</sub>:

- Proposed Increase in Emissions - Kanawha River Terminals, LLC Quincy Dock - R13-1654H	Controlled PM Emissions		Controlled PM <sub>10</sub> Emissions	
	lb/hour	TPY	lb/hour	TPY
<b>Fugitive Emissions</b>				
Open Storage Pile Emissions	0.00	0.00	0.00	0.00
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>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
<b>Point Source Emissions</b>				
Equipment Emissions	0.00	0.00	0.00	0.00
Transfer Point Emissions	1.67	0.00	0.79	0.00
<i>Point Source Emissions Total (PTE)</i>	<i>1.67</i>	<i>0.00</i>	<i>0.79</i>	<i>0.00</i>
<b>INCREASE IN EMISSIONS</b>	<b>1.67</b>	<b>0.00</b>	<b>0.79</b>	<b>0.00</b>

The new facility-wide potential to discharge controlled emissions of 267.15 lb/hr and 1,106.25 TPY of PM, of which 77.29 lb/hr and 11.05 TPY will be PM<sub>10</sub>. Refer to the following table for a summary of the new facility-wide potential to discharge controlled emissions of PM and PM<sub>10</sub>:

- New Facility-wide Emissions - Kanawha River Terminals, LLC Quincy Dock - R13-1654H	Controlled PM Emissions		Controlled PM <sub>10</sub> Emissions	
	lb/hour	TPY	lb/hour	TPY
<b>Fugitive Emissions</b>				
Open Storage Pile Emissions	1.10	4.84	0.52	2.27
Unpaved Haulroad Emissions	2.32	10.38	0.69	3.06
Paved Haulroad Emissions	206.06	903.77	40.19	176.29
<i>Fugitive Emissions Total</i>	<i>209.49</i>	<i>918.98</i>	<i>41.40</i>	<i>181.62</i>
<b>Point Source Emissions</b>				
Equipment Emissions	36.85	132.56	17.32	62.30
Transfer Point Emissions	20.82	54.70	9.85	25.87
<i>Point Source Emissions Total (PTE)</i>	<i>57.67</i>	<i>187.27</i>	<i>27.17</i>	<i>88.18</i>
<b>NEW FACILITY-WIDE EMISSIONS</b>	<b>267.15</b>	<b>1,106.25</b>	<b>68.56</b>	<b>269.80</b>

## REGULATORY APPLICABILITY

NESHAPS and PSD have no applicability to the facility. The proposed construction of a coal screening plant will be subject to the following state and federal rules:

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

The proposed facility will be subject to the requirements of 45CSR5 because it will meet 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 the potential to discharge controlled emissions less than six (6) pounds per hour and ten (10) tons per year of a regulated air pollutant (PM and PM<sub>10</sub>). The applicant has submitted an application for a Class II administrative update. The applicant published a Class I legal advertisement in the *Charleston Gazette Mail* on December 19, 2016 and

submitted \$300 for the application 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 coal screening plant will be subject to 40 CFR 60 Subpart Y because it will be constructed after October 24, 1974 and will processes more than 200 tons of coal per day. The facility should be in compliance with Section 254(b) (less than 10% opacity for coal processing and conveying equipment, coal storage systems, or coal transfer and loading systems 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, this modified coal handling and preparation plant is not listed in 45CSR30 subsection 2.26.b as one of the categories of stationary sources which must include fugitive emissions (open storage piles constructed or modified on or before May 27, 2009 and haulroads) when determining whether it is a major stationary source for the purposes of § 302(j) of the Clean Air Act. The facility's potential to emit will be 90.45 TPY for PM<sub>10</sub> (open storage piles constructed or modified after May 27, 2009 and point sources combined), which is less than the 45CSR30 threshold of 100 TPY of a regulated air pollutant used to define a major stationary source. Therefore, the facility will be subject to 45CSR30 and be classified as a Title V deferred non-major source.

The proposed construction of a coal screening plant will not be subject to the following state and federal rules:

*45CSR14 Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution for the Prevention of Significant Deterioration*

In accordance with 45CSR14 Major Source Determination, this modified coal handling and preparation plant is not one of the 100 TPY stationary sources listed under the definition of "Major Stationary Source" in subsection 2.43.a. Therefore, it must have the potential to emit 250 TPY or more of any regulated pollutant to meet the definition of a major source in subsection 2.43.b. At the end of subsection 2.4.3, this facility is not listed in Table 1 - Source Categories Which Must Include Fugitive Emissions. So, fugitive emissions (from open storage piles constructed or modified on or before May 27, 2009 and haulroads) are not



included when determining major stationary source applicability. The facility's potential to emit will be 192.11 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 construction is not subject to the requirements set forth within 45CSR14.

*45CSR19 Requirements for Pre-Construction Review, Determination of Emission Offsets for Proposed New or Modified Stationary Sources of Air Pollutants and Emission Trading for Intrasource Pollutants*

This existing facility is located in Kanawha County, WV, which currently has a status of non-attainment for PM<sub>2.5</sub> (particulate matter less than 2.5 microns in diameter). In accordance with Subsection 2.35.e, this facility is not a listed facility which must include fugitive emissions when determining if it is a major stationary source. This facility is an existing minor source with a potential to emit of less than 100 TPY for all regulated air pollutants (PM<sub>10</sub>), not including fugitive emissions, and the proposed increase in their potential to emit is less than 100 TPY, not including fugitive emissions. Therefore, the proposed modification does not trigger Major Non-Attainment NSR Review. This facility will continue to be a minor source.

#### TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

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

However, a PM<sub>10</sub> ambient air monitoring station will be required to be maintained, operated and samples taken on the national one-in-six day sampling schedule, which is one 24-hour sample every sixth day. Sampling shall be conducted in accordance with Section 4.2.1 of permit R13-1654H.

#### 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 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.

The haulroads will be controlled by a series of mounted water sprays and on-site water truck. The water truck is sufficiently equipped with pumps and sprays to control the haulroad emissions and will be operated three times a day, more as needed during dry periods. Stockpile and work area emissions are controlled by rainbirds located around the perimeter of the facility and are operated on a time delay. A wheel truck wash is located near the exit of the facility.

The crushers and screens are either fully enclosed or partially enclosed with water, belt conveyors are at least partially enclosed and, with the exception of the belt conveyor transfers to stockpile, all transfer points are fully enclosed.

Various transfer points and belt conveyor discharges to stockpile are equipped with water sprays to be used on an as needed basis, using common sense and good engineering practices.

An additive to prevent freezing will be utilized in the winter months when freezing conditions are present.

The company shall maintain certified daily, monthly and annual records of the amounts of coal throughput at the facility. Example forms are given as Appendices A and B to Permit R13-1654F. Also, the company shall maintain a certified daily and monthly record of the usage and amount of water applied through the wet suppression system, truck washer, water truck and street sweeper. Example forms are given as Appendices C and D to Permit R13-1654F. The Certification of Data Accuracy statement appearing on the reverse side shall be completed within fifteen (15) days of the end of the reporting period. These certified records shall be maintained on site for a period not less than five (5) years and be made available to the Director or his or her duly authorized representative upon request.

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 Kanawha River Terminals, LLC for the modification of their Quincy Dock Facility located near Belle, Kanawha County, WV is hereby recommended.



Daniel P. Roberts, Engineer Trainee  
NSR Permitting Section

January 18, 2017

Date

# Increase in Emissions

V6/17  
OPR.

G10 Emission Calculation Spreadsheet - Revised 9/12/14

## EMISSIONS SUMMARY

Name of applicant: Kanawha River Terminals, LLC

Name of plant: Quincy Dock Facility

Date: 6-Jan-17

### 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>	0.00	0.00	0.00	0.00
<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>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	0.00	0.00	0.00	0.00
<i>Transfer Point Emissions</i>	7.88	(0.00)	1.67	0.00
<b>Point Source Emissions Total*</b>	<b>7.88</b>	<b>(0.00)</b>	<b>1.67</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>7.88</b>	<b>(0.00)</b>	<b>1.67</b>	<b>0.00</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>	0.00	0.00	0.00	0.00
<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>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	0.00	0.00	0.00	0.00
<i>Transfer Point Emissions</i>	3.73	0.00	0.79	(0.00)
<b>Point Source Emissions Total*</b>	<b>3.73</b>	<b>0.00</b>	<b>0.79</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>3.73</b>	<b>0.00</b>	<b>0.79</b>	<b>(0.00)</b>
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