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ENGINEERING EVALUATION / FACT SHEET

BACKGROUND INFORMATION

Application No.:	R13-2790B
Plant ID No.:	069-00099
Applicant:	Tunnel Ridge, LLC
Facility Name:	Tunnel Ridge Mine
Location:	Ohio County
SIC Code:	1222
Application Type:	Modification
Received Date:	March 11, 2015
Engineer Assigned:	Thornton E. Martin Jr.
Fee Amount:	$2,000
Date Received:	March 20, 2015
Complete Date:	April 20, 2015
Applicant Ad Date:	March 19, 2015
Newspaper:	*Intelligencer*
UTM's:	Easting: 529.19254 km Northing: 4,444.98948 km Zone: 17T
Description:	This modification application is to increase throughput at the Tunnel Ridge Mine facilities. No new equipment other than diesel fuel tanks will be installed.

BACKGROUND

Tunnel Ridge, LLC planned to open and operate the new "Tunnel Ridge" Mine in two distinct phases. Phase I consisted of the initial face-up and installation of the temporary slope conveyor to handle initial continuous miner corridor development production as the entries are driven from the face up area into the seam. A modification to registration R13-2790 was considered as Phase II which involved additional construction in preparation for higher production volumes and changes to the existing permit.

Note: Phase I commenced in early April, 2009.

DESCRIPTION OF PROCESS

Originally, in Phase I operations, conveyor BC-1 was to transfer the coal to a stacker belt BC-2. BC-2 would in turn stack coal in OS-1, the raw coal stockpile. BC-2 and OS-1 was referenced in the R13-2790A application, but neither was projected to be used and therefore were omitted from the Equipment List.

As Phase II operations came online, the coal was transferred from the slope belt BC-1 onto a series of overland conveyors BC-3 through BC-7, which fed the Screening building. If there are problems with the overland belt, BC-2 may be utilized to temporarily stock coal into stockpile OS-1. *The applicant would like the ability to utilize OS-1 and BC-2 for emergency use only*. Under normal conditions, raw coal belt BC-7 will transfer the raw coal to scalping screens SCR-1 and SCR-2. Oversize material (scalp rock) will transfer to rock sizers CR-1 & CR-2.

Raw Coal:

The coal that passes through the screens SCR-1 and SCR-2 will drop onto the raw coal stockpile conveyor BC-8. BC-8 can feed to raw coal stockpile OS-2 through a stacking tube ST-1 or can feed to belt BC-9. Belt BC-9 can transfer to raw coal stockpile OS-3, raw coal stockpile OS-4 through stacking tube ST-2 or onto conveyor BC-10 (*BC-10 not yet constructed*). If conveyor BC-10 is constructed , it will transfer coal via stacking tube ST-3 into raw coal stockpile OS-5. Raw coal from these stockpiles is fed to the underground reclaim conveyor BC-11. BC-11 transfers to screen SCR-3 in the Crushing building. Screen SCR-3 will produce three products. The oversize will transfer to crusher CR-3, which will discharge onto conveyor BC-12. The midsize and fines will both go straight to conveyor BC-12. *In the future, the fines may go from the SCR-3 to conveyor BC-13(BC-13 not yet constructed). Conveyor BC-12 will feed raw coal to the wet wash preparation plant.*

Clean Coal:

Clean coal will be collected at the wet wash preparation plant by conveyor BC-14. Coal from conveyor BC-14 will transfer either to conveyor BC-15 or silo feed conveyor BC-18. Most of the coal will initially transfer to BC-18. The coal that is transferred to conveyor BC-15 will transfer to stacker belt BC-16. BC-16 will stack coal into clean coal stockpile OS-6. Coal will be reclaimed from OS-6 with a trap feeder, which will transfer coal to reclaim conveyor BC-17. BC-17 will discharge onto silo feed conveyor BC-18. BC-18 will first fill clean coal silo BS-1 or transfer to conveyor BC-19. BC-19 will fill clean coal silo BS-2 or transfer coal to conveyor BC-20. BC-20 will transfer coal to conveyor BC-21. BC-21 will feed stockpile OS-7 through stacking tube ST-4 or will feed conveyor BC-22. BC-22 feeds stockpile OS-8 through stacking tube ST-5. Coal from stockpiles OS-7 & OS-8 is reclaimed by the reclaim conveyor BC-23. BC-23 will in turn transfer coal to conveyor BC-27. BC-27 will also collect coal from clean coal silos BS-2 and BS-3. Silos BS-2 & BS-3 will be fed onto conveyor BC-27 by conveyor BC-25 and conveyor BC-24 respectively. Conveyor BC-27 transfers the coal onto the barge loading conveyor BC-28. BC-28 is also fed by clean coal silo BS-1 via conveyor BC-26. BC-28 will then be utilized to load barges on the Ohio River through a telescopic chute with a pant leg. *Under current operations, belts BC-21 through BC-25 and BC-27 as well as stockpiles OS-7 and OS-8 have not yet been constructed. The clean coal is currently transferred from the clean coal silos via belt BC-26 to BC-28, which loads*

the barges. However, Tunnel Ridge would like the flexibility of retaining the initially proposed layout should it be constructed as such at a later time.

Refuse:

Rock discharged from crushers CR-1 and CR-2 goes to conveyor BC-29. BC-29 is reversible and can be set to return the crushed material to conveyor BC-8, if it is determined that the material has high coal content. Assuming that the majority of the material is rock, BC-29 will usually transfer to conveyor BC-30. BC-30 also collects refuse material from the wet wash preparation plant. BC-30 then transfers to conveyor BC-31. BC-31 transfers material to conveyor BC-32. Conveyor BC-32 can transfer material to one of three different conveyors: BC-33, BC-35 or BC-37. Conveyor BC-33 transfers material to stacker belt BC-34 for placement on the refuse pile. Conveyor BC-35 transfers to stacker belt BC-36 also for placement on the refuse pile. Conveyor BC-37 can transfer to conveyor BC-38 or stacker belt BC-40. Conveyor BC-38 transfers material to stacker belt BC-39 for placement on the refuse pile. Stacker belt BC-40 fills refuse bin BS-4, which loads trucks for placing refuse at more remote locations of the refuse pile. *Under current operations, belts BC-33 through BC-36 and belt BC-39 have not yet been constructed. The refuse is primarily loaded out through belt BC-40 to refuse bin BS-4, however, Tunnel Ridge would like to retain the additional, not yet constructed belts in the permit, as they will likely become necessary as the operation matures.*

There are no VOC's or HAP's associated with the Tunnel Ridge Mine. Emissions for the largest tank and highest throughput (AST-1) was calculated using EPA's TANKS Program. Given the very low emissions from this tank, it is clear that even in aggregate with additional, much smaller, lower throughput storage tanks at the facility, the 2 TPY threshold for HAP's or VOC's will not be approached.

The facility shall be modified and operated in accordance with the following equipment and control device information:

Note: OS-1, BC-2 and the endloader from the original Phase I application (R13-2790) were never installed were no longer projected to be used as part of Phase II operations. Therefore, they were eliminated from Emission Units Table in (R13-2790A). OS-1 and BC-2 will be included in the current Emission Units Table (R13-2790B) and designated as Emergency Use Only.

Equipment ID No.	AMR[1]	Year	Description	Maximum Rated Throughputs		Control Equipment[2]	Associated Transfer Points		
				TPH	TPY x 10 [3]		Location: B -Before A -After	ID. No.	Control Equipment[2]
Raw Coal Circuit									
BC-1	A M	2009 2015	Raw Coal Belt Conveyor transfers raw coal from Tunnel Ridge mine to BC-2 or BC-3	5,000	14,000	PE	A	T-1	PE
BC-2	A R M	2009 2009 2015	Stocking Belt conveys raw coal (6"x0) to OS-1	(Emergency Use Only)		PE	B A A	T-1 T-2 T-3	PE MD MD
OS-1	A R M	2009 2009 2015	Raw Coal Open Stockpile	(Emergency Use Only)		N			
BC-3	A M	2009 2015	Raw Coal Belt Conveyor transfers raw coal from BC-1 to BC-4	5,000	14,000	PE	B A	T-1 T-4	PE PE

Equip-ment ID No.	AMR[1]	Year	Description	Maximum Rated Throughputs		Control Equip-ment[2]	Associated Transfer Points		
				TPH	TPY x 10^3		Location: B -Before A -After	ID. No.	Control Equip-ment[2]
BC-4	A M	2009 2015	Raw Coal Belt Conveyor transfers raw coal from BC-3 to BC-5	5,000	14,000	PE	B A	T-4 T-5	PE PE
BC-5	A M	2009 2015	Raw Coal Belt Conveyor transfers raw coal from BC-4 to BC-6	5,000	14,000	PE	B A A	T-5 T-6 T-7	PE PE PE
BC-6	A M	2009 2015	Raw Coal Belt Conveyor transfers raw coal from BC-5 to BC-7	5,000	14,000	PE	B A A	T-7 T-8 T-9	PE PE PE
BC-7	A M	2009 2015	Raw Coal Belt Conveyor transfers raw coal from BC-6 to screens SCR-1 and SCR-2	5,000	14,000	PE	B A	T-9 T-10	PE FE
SCR-1	A M	2009 2015	Screen discharges raw coal to SCR-2 and oversize or scalp rock discharges to CR-1 and CR-2	2,500	7,000	FE/WS	B A A	T-10 T-11 T-11A	FE FE FE
SCR-2	A M	2009 2015	Screen discharges raw coal to BC-8	2,500	7,000	FE/WS	B A	T-10 T-11A	FE FE
BC-8	A M	2009 2015	Raw Coal Belt Conveyor transfers raw coal to OS-2 or BC-9	5,000	13,300	PE	B B A	T-11A T-13 T-14	FE FE PE/ST
CR-1	A M	2009 2015	Flex Tooth Crusher discharges scalp rock to BC-29 or BC-8 if high coal content	250	350	FE/WS	B A	T-11 T-12	FE PE
CR-2	A M	2009 2015	Flex Tooth Crusher discharges scalp rock to BC-29 (see Refuse Circuit) or BC-8 if high coal content	250	350	FE/WS	B A	T-11 T-12	FE PE
OS-2	A M	2009 2015	238,268 ft ^{2}- Open Stockpile with Stacking Tube ST-1 fed to underground reclaim conveyor BC-11	----	5,985.0	N	B A	T-14 T-18	PE/ST UC
BC-9	A M	2009 2015	Raw Coal Belt Conveyor transfers raw coal to OS-3 or OS-4 or BC-10 (if constructed)	5,000 5,000	7,315 6,650	PE	B A A	T-14 T-15 T-16	PE/ST PE PE/ST
OS-3	A M	2009 2015	55,156 ft ^{2}- Open Stockpile fed to underground reclaim conveyor BC-11	----	665	N	B A	T-15 T-18	PE UC
OS-4	A M	2009 2015	238,268 ft ^{2}- Open Stockpile with Stacking Tube ST-2 fed to underground reclaim conveyor BC-11	----	5,985.0	N	B A	T-16 T-18	PE/ST UC
BC-11	A M	2009 2015	Underground Conveyor receives raw coal from OS-2, OS-3, OS-4 and transfers to SCR-3 or to BC-12 in the Crushing Building	2,200	13,300	UC	B B B A	T-14 T-15 T-16 T-19	PE/ST PE PE/ST FE
BC-10	A M	2010 2015	Raw Coal Belt Conveyor (if constructed) transfers raw coal to OS-5	5,000	665	PE	B A	T-16 T-17	PE/ST PE/ST
OS-5	A M	2010 2015	62,218 ft ^{2}- Open Stockpile with Stacking Tube ST-3 (if BC-10 is constructed)	----	665	N	B A	T-17 T-18	PE/ST
SCR-3	A M	2009 2015	Screen produces oversize, midsize and fines. Oversize will discharge to CR-3, midsize and fines will discharge to BC-12	1,800	13,300	FE/WS	B A A A	T-19 T-20A T-20B T-20C	FE FE FE FE
CR-3	A M	2009 2015	Crusher receives oversize raw coal from SCR-3 and discharges onto BC-12	200	1,330	FE/WS	B A	T-20A T-21	FE FE
BC-12	A M	2009 2015	Raw Coal Belt Conveyor receives raw coal from BC-11, midsize and fines from SCR-3 and CR-3 then transfers to Preparation Plant	2,000	13,300	PE	B B B B A	T-19 T-20B T-20C T-21 T-24	FE FE FE FE FE
Clean Coal Circuit									
BC-14	A M	2009 2015	Clean Coal Collecting Belt Conveyor receives clean coal from preparation plant and transfers to BC-15 or BC-18	1,500	9,044	PE	B A	T-25 T-29	FE FE

Equip-ment ID No.	AMR[1]	Year	Description	Maximum Rated Throughputs		Control Equip-ment[2]	Associated Transfer Points		
				TPH	TPY x 10 ^{3}		Location: B -Before A -After	ID. No.	Control Equip-ment[2]
BC-15	A M	2009 2015	Clean Coal Transfer Belt Conveyor receives clean coal from BC-14 and transfers to stacking belt BC-16	1,700	452.2	PE	B A	T-29 T-30	FE PE
BC-16	A M	2009 2015	Stacking Belt Conveyor receives clean coal from BC-15 and discharges onto stockpile OS-6	1,700	452.2	PE	B A	T-30 T-31	PE PE
OS-6	A M	2009 2015	31,979 ft ^{2}- Clean Coal Stacker Stockpile receives clean coal from stacker belt BC-16 and is reclaimed through trap feeder to BC-17	----	452.2	N	B A	T-31 T-32	PE PE
BC-17	A M	2009 2015	Clean Coal Trap Belt Conveyor receives clean coal from OS-6 trap feeder and transfers to Silo Feed belt BC-18	1,700	452.2	PE	B A	T-32 T-33	PE PE
BC-18	A M	2009 2015	Silo Feed (Tunnel) Belt Conveyor receives clean coal from BC-14 or BC-17 and transfers to clean coal silo BS-1 or to BC-19	1,700	9,044	PE	B B A	T-29 T-33 T-34	FE PE PE
BS-1	A M	2009 2015	12,000 ton Clean Coal Silo receives clean coal form BC-18 and discharges through 2 mass flow gates onto BC-26	----	2,912.168	FE	B A	T-34 T-46	PE FE
BC-19	A M	2009 2015	Silo Feed Conveyor #2 receives clean coal from BC-18 and transfers to clean coal silo BS-2 or to BC-20	1,700	6,131.832	PE	B A	T-34 T-35	PE PE
BS-2	A M	2009 2015	8,000 ton Clean Coal Silo receives clean coal from BC-19 and discharges through mass flow gate onto weigh belt BC-25	----	1,935.416	FE	B A	T-35 T-44	PE FE
BC-20	A M	2009 2015	Silo Tripper Belt Conveyor receives clean coal from BC-19 and into clean coal silo BS-3	1,700	4196.416	PE	B A A	T-35 T-36 T-37	PE PE PE
BS-3	A M	2009 2015	8,000 ton Clean Coal Silo receives clean coal from BC-20 and discharges through mass flow gate onto weigh belt BC-24	----	1,935.416	FE	B A	T-36 T-42	PE FE
BC-21	A M	2009 2015	Clean Coal Feed Conveyor receives clean coal from BC-20 and discharges onto OS-7 via stacking tube or to BC-22	1,700	2,261	PE	B A	T-37 T-38	PE PE/ST
OS-7	A M	2009 2015	58,820 ft ^{2}- Open Clean Coal Stockpile with Stacking Tube ST-4 fed to underground reclaim conveyor BC-23	----	1,130.500	N	B A	T-38 T-40	PE/ST UC
BC-22	A M	2009 2015	Clean Coal Feed Conveyor receives clean coal from BC-21 and discharges onto OS-8 via stacking tube	1,700	1,130.5	PE	B A	T-38 T-39	PE/ST PE/ST
OS-8	A M	2009 2015	58,820 ft ^{2}- Open Clean Coal Stockpile with Stacking Tube ST-4 fed to underground reclaim conveyor BC-23	----	1,130.500	N	B A	T-39 T-40	PE/ST UC
BC-23	A M	2009 2015	Clean Coal Reclaim Conveyor receives clean coal from stockpiles OS-7 and OS-8 and transfers to BC-27	4,000	2,261	UC	B A	T-40 T-41	UC FE
BC-26	A M	2009 2015	Silo Transfer Conveyor receives clean coal from BS-1 and transfers across belt scale to barge loading conveyor BC-28	4,000	2,912.168	PE	B A	T-46 T-47	FE PE
BC-25	A M	2009 2015	Weigh Belt Feed Conveyor receives clean coal from BS-2 and transfers onto BC-27	4,000	1,935.416	PE	B A	T-44 T-45	FE PE
BC-24	A M	2009 2015	Weigh Belt Feed Conveyor receives clean coal from BS-3 and transfers onto BC-27	4,000	1,935.416	PE	B A	T-42 T-43	FE PE
BC-27	A M	2009 2015	Clean Coal Transfer Conveyor receives clean coal from BC-23, BC-24 and BC-25 and transfers to BC-28	4,000	6,131.832	PE	B B B A	T-41 T-43 T-45 T-48	FE PE PE PE

Equip-ment ID No.	AMR[1]	Year	Description	Maximum Rated Throughputs		Control Equip-ment[2]	Associated Transfer Points		
				TPH	TPY x 10 [3]		Location: B -Before A -After	ID. No.	Control Equip-ment[2]
BC-28	A M	2009 2015	Barge Loading Conveyor receives clean coal from BC-26 and BC-27 and transfers across load out belt scale to barge via telescoping chute with pant leg	5,000	9,044	FE	B B A	T-47 T-48 T-51	PE PE TC
Refuse Circuit									
BC-29	A M	2009 2015	(Reversing) Refuse Transfer Conveyor receives scalp rock from crusher CR-1 and CR-2 then transfers to BC-30. Belt can be reversed to discharge onto BC-8 if rock contains high coal content	500	700	PE	B A	T-12 T-52	PE PE
BC-30	A M	2009 2015	Preparation Plant Refuse Collecting Conveyor receives refuse from BC-29 and refuse from the wet wash plants then transfers across refuse belt scale to BC-31	1,600	4,956	PE	B A	T-52 T-53	PE PE
BC-31	A M	2009 2015	Refuse Transfer Conveyor receives refuse from BC-30 and transfers to BC-32	1,600	4,956	PE	B A	T-53 T-54	PE PE
BC-32	A M	2009 2015	Refuse Transfer Conveyor receives refuse from BC-31 and transfers to either BC-33, BC-35 or BC-37	1,600	4,956	PE	B A A	T-54 T-55 T-58	PE PE PE
BC-33	A M	2009 2015	Refuse Transfer Conveyor receives refuse from BC-32 and transfers to BC-34	1,600	1,982.4	PE	B A	T-55 T-56	PE FE
BC-34	A M	2009 2015	Refuse Radial Stacker Conveyor receives refuse from BC-33 and transfers to Refuse Area	1,600	1,982.4	PE	B A	T-56 T-57	PE MD
BC-35	A M	2009 2015	Refuse Transfer Conveyor receives refuse from BC-32 and transfers to BC-36	1,600	0	PE	B A	T-58 T-59	PE PE
BC-36	A M	2009 2015	Refuse Radial Stacker Conveyor receives refuse from BC-33 and transfers to Refuse Area	1,600	0	PE	B A	T-59 T-60	PE MD
BC-37	A M	2009 2015	Refuse Transfer Conveyor receives refuse from BC-32 and transfers to BC-38 or to BC-40	1,600	2,973.6	PE	B A	T-58 T-61	PE PE
BC-38	A M	2009 2015	Refuse Transfer Conveyor receives refuse from BC-37 and transfers to BC-39	1,600	1,982.4	PE	B A	T-61 T-62	PE PE
BC-39	A M	2009 2015	Refuse Radial Stacker Conveyor receives refuse from BC-33 and transfers to Refuse Area	1,600	1,982.4	PE	B A	T-62 T-63	PE MD
BC-40	A M	2009 2015	Refuse Stacker Conveyor receives refuse from BC-37 and transfers to BS-4	1,600	1,982.4	PE	B A	T-61 T-64	PE PE
BS-4	A M	2009 2015	200 Ton Bin with mobile hydraulic gate for loading onto trucks	----	991.2	FE	B A	T-64 T-65	PE MD
Diesel Tanks									
AST-1	A M	2009 2015	Diesel Fuel Tank - originally listed as 1,000 gallon capacity has been replaced by 12,000 gallon capacity.	N/A	12,000	N	N/A	N/A	N
AST-2	A	2015	Diesel Fuel Tank	N/A	2,000	N	N/A	N/A	N
AST-3	A	2015	Diesel Fuel Tank	N/A	520	N	N/A	N/A	N
AST-4	A	2015	Diesel Fuel Tank	N/A	520	N	N/A	N/A	N
AST-5	A	2015	Diesel Fuel Tank	N/A	520	N	N/A	N/A	N
AST-8	A	2015	Diesel Fuel Tank	N/A	12,000	N	N/A	N/A	N
AST-10	A	2015	Diesel Fuel Tank	N/A	1,000	N	N/A	N/A	N
AST-11	A	2015	Diesel Fuel Tank	N/A	2,000	N	N/A	N/A	N

[1] A - Addition; M - Modification; R - Removal (Existing unmodified equipment to be included in the permit is labeled with an M.)

[2] FE - Full Enclosure; PE - Partial Enclosure; MC - Moisture Content; WS - Water Sprays; N - None; UC - Underbin Conveyor; ST - Stacking Tube; TC - Telescopic Chute; BH - Baghouse

[3] Value X 1,000

DESCRIPTION OF FUGITIVE EMISSIONS

Potential sources of fugitive particulate emissions for this facility include emissions, which are not captured by pollution control equipment, emissions from open stockpiles and vehicular traffic on approximately 0.28 mile (round trip) of existing unpaved haulroads. Particulate matter emissions on haulroads will be controlled by water truck.

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

SITE INSPECTION

A site inspection was conducted by Al Carducci of the Northern Panhandle Regional Office on November 24, 2014. The facility was given a score of 10 - Out of Compliance. The Inspection Notes state "Out of compliance with hourly and annual mining limits. Permit section of DAQ made a mistake and the actual annual allowable should read 14.01MM TPY and not 3.822MM TPY. This permit modification is to correct the throughputs for the facility.

Directions to the Tunnel Ridge Mine are as follows: Take Rt. 2 North from Wheeling. Approximately 8 miles to Short Creek Road. Take Short Creek Road CR1 approximately 5 miles to Preparation Plant area. Mine Portal is another 2 miles past Cherry Hill Road.

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

Fugitive emission calculations for continuous and batch drop operations, transfer points, storage piles 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 estimated emission calculations were performed by the applicant and were checked for accuracy and completeness by the writer.

The proposed modification will result in an estimated increased potential to discharge controlled emissions of 57.84 TPY of particulate matter, of which 23.68 TPY are less than ten (10) microns in diameter:

Emissions Summary - ***Tunnel Ridge, LLC*** ***R13-2790B,*** *PROPOSED*	**Controlled PM Emissions**		**Controlled PM_{10} Emissions**	
	lb/hour	TPY	lb/hour	TPY
Fugitive Emissions				
Stockpile Emissions	5.86	25.67	2.75	12.06
Unpaved Haulroad Emissions	30.68	46.92	6.37	9.75
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	*36.54*	*72.59*	*8.91*	*21.81*
Point Source Emissions				
Equipment Emissions	70.20	141.19	32.99	66.36
Transfer Point Emissions	44.93	36.19	21.25	17.12
Point Source Emissions Total (PTE)	*115.13*	*177.38*	*54.24*	*83.48*
FACILITY EMISSIONS TOTAL	**151.66**	**249.97**	**63.37**	**105.29**

Emissions Summary - ***Tunnel Ridge, LLC*** ***R13-2790A***, *EXISTING*	**Controlled PM Emissions**		**Controlled PM_{10} Emissions**	
	lb/hour	TPY	lb/hour	TPY
Fugitive Emissions				
Stockpile Emissions	5.40	23.64	2.54	11.11
Unpaved Haulroad Emissions	30.68	33.52	6.37	6.96
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	*36.08*	*57.16*	*8.91*	*18.07*
Point Source Emissions				
Equipment Emissions	70.20	100.85	32.99	47.40
Transfer Point Emissions	53.20	34.12	25.16	16.14
Point Source Emissions Total (PTE)	*123.40*	*134.97*	*58.15*	*63.54*
FACILITY EMISSIONS TOTAL	**159.48**	**192.13**	**67.06**	**81.61**

Emissions Summary - ***Tunnel Ridge, LLC*** *NET CHANGE*	**Controlled PM Emissions**		**Controlled PM_{10} Emissions**	
	lb/hour	TPY	lb/hour	TPY
Fugitive Emissions				
Stockpile Emissions	0.46	2.03	0.22	0.95
Unpaved Haulroad Emissions	0.00	13.41	0.00	2.79
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	*0.46*	*15.43*	*0.22*	*3.74*
Point Source Emissions				
Equipment Emissions	0.00	40.34	0.00	18.96
Transfer Point Emissions	(8.27)	2.07	(3.91)	0.98
Point Source Emissions Total (PTE)	*(8.27)*	*42.41*	*(3.91)*	*19.94*
FACILITY EMISSIONS TOTAL	**(7.81)**	**57.84**	**(3.69)**	**23.68**

REGULATORY APPLICABILITY

NESHAPS and PSD have no applicability to the proposed facility. 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 and Coal Handling Operations

The facility is subject to the requirements of 45CSR5 because it meets the definition of "Wet wash 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 within application R13-2790B and any amendments thereto 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 increased potential to discharge controlled emissions greater than 144 pounds per day of a regulated air pollutant (PM and PM_{10}). The applicant submitted the proper $1000 application fee and $1,000 NSPS fee and published a Class I legal advertisement in the *Intelligencer* on March 19, 2015.

45CSR16 Standards of Performance for New Stationary Sources

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

This facility will be subject to 40 CFR 60 Subpart Y because it will have been constructed after October 24, 1974 and will process more than 200 tons of coal per day. The proposed modification of a coal processing facility will include throughput changes to include the equipment used in the loading, unloading and conveying operations of the affected facility, constructed, reconstructed or modified after May 27, 2009 in 40 CFR 60 Subpart Y. 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 constructed, re-constructed or modified after April 28, 2008) when the particulate matter control methods and devices proposed are in operation. Therefore, the proposed construction is subject to 45CSR16, which incorporates by reference 40 CFR 60 Subpart Y - Standards of Performance for Coal Preparation and Processing Plants. The facility must submit a fugitive coal dust emissions control plan as required by 40CFR§60.254(c)(2) after permit issuance.

45CSR30 Requirements for Operating Permits

The facility's potential to emit will be 83.48 TPY of a regulated air pollutant (PM_{10}), not including fugitive emissions, which is less than the 45CSR30 threshold of 100 TPY for a major source. However, the facility is subject to 40 CFR 60 Subpart Y. Therefore, the facility is still subject to 45CSR30 and remains classified as a Title V deferred non-major source.

The proposed modification 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, the proposed coal handling and truck loadout facility is not listed in Table 1. The facility will have the potential to emit 177.38 TPY of a regulated air pollutant (PM), not including fugitive emissions, which is less than the 45CSR14 threshold of 250 TPY. This facility is not listed in Table 2, and so fugitive emissions are not included when determining source applicability. Therefore, the proposed modification is not subject to the requirements set forth within 45CSR14.

40 CFR Part 51, Appendix S Applicability

Under Appendix S, the definition of a major source of $PM_{2.5}$ is, including fugitive emissions, a PTE at or above 100 TPY. Since $PM_{2.5}$ is roughly 10% of PM_{10} for the Tunnel Ridge sources, the facility would have a PTE, including fugitives, of 10.53 TPY and, therefore, it is not defined as a major source under Appendix S.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

A toxicity analysis was not performed because the pollutants that will be emitted from this facility are PM (particulate matter), PM_{10} (particulate matter less than 10 microns in diameter) and $PM_{2.5}$ (particulate matter less than 2.5 microns in diameter), which are non-toxic pollutants.

AIR QUALITY IMPACT ANALYSIS

Air dispersion modeling was not required due to the size and location of this facility. This facility is located in Ohio County, WV, which is currently in attainment for PM (particulate matter) and PM_{10} (particulate matter less than 10 microns in diameter). Ohio County, WV was re-designated to attainment for $PM_{2.5}$ (particulate matter less than 2.5 microns in diameter) as of September 2013.

MONITORING OF OPERATIONS

For the purposes of determining compliance with maximum throughput limits, the applicant shall maintain certified daily and monthly records. An example form is included as Appendix A to Permit R13-2790B. An example form for tracking the amount of water applied through the water truck is included as Appendix B to Permit R13-2790B. An example form for the Monthly Opacity Testing is included as Appendix C to Permit R13-2790B. 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 by the permittee for at least five (5) years and shall be made available to the Director of the Division of Air Quality or his or her duly authorized representative upon request.

According to the DAQ Policy concerning tanks, since Tunnel Ridge, LLCs' tanks are less than 20,000 gallons, there will be no emission limits set for tanks either individually or in aggregate. In addition, there will be no maximum throughput set for tanks in the permit. However, all tanks and their respective size will be listed in the Emission Units Table.

RECOMMENDATION TO DIRECTOR

The information contained in this modification permit application indicates that compliance with all applicable regulations should be achieved when all of the proposed particulate matter control methods are in operation. Due to the location, nature of the process, and control methods proposed, adverse impacts on the surrounding area should be minimized. No public comments were received. Therefore, the granting of a permit to Tunnel Ridge, LLC for the modification of their Tunnel Ridge Mine located in Triadelphia, Ohio County, WV is hereby recommended.

Thornton E. Martin Jr.,
Permit Engineer

April 20, 2015
Date