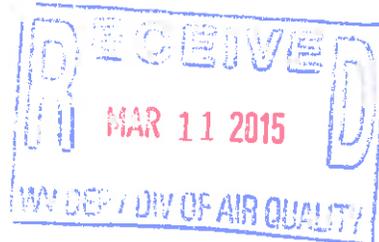




Tunnel Ridge, LLC
James C. Ashby
Manager, Environmental Affairs

February 12, 2015

Mr. Thornton E. Martin Jr.
West Virginia Department Environmental Protection
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304



RE: Permit Modification Application
R13-2790A
DAQ Facility ID # 069-00099

Dear Mr. Martin:

Enclosed please find one original and three copies of the application to modify the above referenced Regulation 13 Air Permit for Tunnel Ridge's "Tunnel Ridge" mine in Ohio County. The required check (\$1,000.00 for the application fee plus \$1,000.00 for the NSPS fee) is enclosed.

This modification application is to increase throughput at the referenced permitted facility. Additionally, Tunnel Ridge would like to remove language pertaining to limits on underground mining unit production, as we are of the opinion that limitations should not apply until the coal exits the mine via conveyor belt BC-1.

As I will be handling the application from this office, would you please address all correspondence to the following address: (293 Table Rock Road, Oakland Maryland, 21550). Thank you.

Sincerely,

James C. Ashby

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WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY

601 57th Street, SE
 Charleston, WV 25304
 (304) 926-0475
www.dep.wv.gov/daq

**APPLICATION FOR NSR PERMIT
 AND
 TITLE V PERMIT REVISION
 (OPTIONAL)**

PLEASE CHECK ALL THAT APPLY TO NSR (45CSR13) (IF KNOWN):

- CONSTRUCTION MODIFICATION RELOCATION
 CLASS I ADMINISTRATIVE UPDATE TEMPORARY
 CLASS II ADMINISTRATIVE UPDATE AFTER-THE-FACT

PLEASE CHECK TYPE OF 45CSR30 (TITLE V) REVISION (IF ANY):

- ADMINISTRATIVE AMENDMENT MINOR MODIFICATION
 SIGNIFICANT MODIFICATION

IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS ATTACHMENT S TO THIS APPLICATION

FOR TITLE V FACILITIES ONLY: Please refer to "Title V Revision Guidance" in order to determine your Title V Revision options (Appendix A, "Title V Permit Revision Flowchart") and ability to operate with the changes requested in this Permit Application.

Section I. General

1. Name of applicant (as registered with the WV Secretary of State's Office): Tunnel Ridge, LLC		2. Federal Employer ID No. (FEIN): 731618137	
3. Name of facility (if different from above): Tunnel Ridge Mine		4. The applicant is the: <input type="checkbox"/> OWNER <input type="checkbox"/> OPERATOR <input checked="" type="checkbox"/> BOTH	
5A. Applicant's mailing address: 1146 Monarch Street Lexington, KY 40513		5B. Facility's present physical address: 2596 Battle Run Road Triadelphia, WV 26059	
6. West Virginia Business Registration. Is the applicant a resident of the State of West Virginia? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO - If YES, provide a copy of the Certificate of Incorporation/Organization/Limited Partnership (one page) including any name change amendments or other Business Registration Certificate as Attachment A. - If NO, provide a copy of the Certificate of Authority/Authority of L.L.C./Registration (one page) including any name change amendments or other Business Certificate as Attachment A.			
7. If applicant is a subsidiary corporation, please provide the name of parent corporation: Alliance Coal, LLC			
8. Does the applicant own, lease, have an option to buy or otherwise have control of the proposed site? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO - If YES, please explain: Fee Ownership - If NO, you are not eligible for a permit for this source.			
9. Type of plant or facility (stationary source) to be constructed, modified, relocated, administratively updated or temporarily permitted (e.g., coal preparation plant, primary crusher, etc.): Coal Mine, Preparation Plant, Loadout, and Associated Equipment		10. North American Industry Classification System (NAICS) code for the facility: 212111	
11A. DAQ Plant ID No. (for existing facilities only): 069-00099		11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only): R13-2790A	

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

12A.

- For **Modifications, Administrative Updates** or **Temporary permits** at an existing facility, please provide directions to the *present location* of the facility from the nearest state road;
- For **Construction** or **Relocation permits**, please provide directions to the *proposed new site location* from the nearest state road. Include a **MAP** as **Attachment B**.

Take Rt. 2 North from Wheeling approximately 8 miles to Short Creek Road. Take Short Creek Road approximately 5 miles to the Preparation Plant. The mine portal is another two miles further.

12.B. New site address (if applicable):

N/A

12C. Nearest city or town:

Short Creek, WV

12D. County:

Ohio

12.E. UTM Northing (KM): 4444.98948

12F. UTM Easting (KM): 529.19254

12G. UTM Zone: 17T

13. Briefly describe the proposed change(s) at the facility:

This modification application is submitted to increase the permitted throughput of the existing facility.

14A. Provide the date of anticipated installation or change: Immediately upon approval/ /

- If this is an **After-The-Fact** permit application, provide the date upon which the proposed change did happen: / /

14B. Date of anticipated Start-Up if a permit is granted:

Immediately/ /

14C. Provide a **Schedule** of the planned **Installation of/Change to** and **Start-Up** of each of the units proposed in this permit application as **Attachment C** (if more than one unit is involved).

15. Provide maximum projected **Operating Schedule** of activity/activities outlined in this application:

Hours Per Day 24

Days Per Week 7

Weeks Per Year 52

16. Is demolition or physical renovation at an existing facility involved? YES NO

17. **Risk Management Plans.** If this facility is subject to 112(r) of the 1990 CAAA, or will become subject due to proposed changes (for applicability help see www.epa.gov/ceppo), submit your **Risk Management Plan (RMP)** to U. S. EPA Region III.

18. **Regulatory Discussion.** List all Federal and State air pollution control regulations that you believe are applicable to the proposed process (*if known*). A list of possible applicable requirements is also included in Attachment S of this application (Title V Permit Revision Information). Discuss applicability and proposed demonstration(s) of compliance (*if known*). Provide this information as **Attachment D**.

Section II. Additional attachments and supporting documents.

19. Include a check payable to WVDEP – Division of Air Quality with the appropriate **application fee** (per 45CSR22 and 45CSR13).

20. Include a **Table of Contents** as the first page of your application package.

21. Provide a **Plot Plan**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as **Attachment E** (Refer to **Plot Plan Guidance**).

- Indicate the location of the nearest occupied structure (e.g. church, school, business, residence).

22. Provide a **Detailed Process Flow Diagram(s)** showing each proposed or modified emissions unit, emission point and control device as **Attachment F**.

23. Provide a **Process Description** as **Attachment G**.

- Also describe and quantify to the extent possible all changes made to the facility since the last permit review (*if applicable*).

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

24. Provide **Material Safety Data Sheets (MSDS)** for all materials processed, used or produced as **Attachment H**.
– For chemical processes, provide a MSDS for each compound emitted to the air.

25. Fill out the **Emission Units Table** and provide it as **Attachment I**.

26. Fill out the **Emission Points Data Summary Sheet (Table 1 and Table 2)** and provide it as **Attachment J**.

27. Fill out the **Fugitive Emissions Data Summary Sheet** and provide it as **Attachment K**.

28. Check all applicable **Emissions Unit Data Sheets** listed below:

- | | | |
|--|---|---|
| <input type="checkbox"/> Bulk Liquid Transfer Operations | <input checked="" type="checkbox"/> Haul Road Emissions | <input type="checkbox"/> Quarry |
| <input type="checkbox"/> Chemical Processes | <input type="checkbox"/> Hot Mix Asphalt Plant | <input checked="" type="checkbox"/> Solid Materials Sizing, Handling and Storage Facilities |
| <input type="checkbox"/> Concrete Batch Plant | <input type="checkbox"/> Incinerator | <input checked="" type="checkbox"/> Storage Tanks |
| <input type="checkbox"/> Grey Iron and Steel Foundry | <input type="checkbox"/> Indirect Heat Exchanger | |
| <input type="checkbox"/> General Emission Unit, specify | | |

Fill out and provide the **Emissions Unit Data Sheet(s)** as **Attachment L**.

29. Check all applicable **Air Pollution Control Device Sheets** listed below:

- | | | |
|--|---|--|
| <input type="checkbox"/> Absorption Systems | <input type="checkbox"/> Baghouse | <input type="checkbox"/> Flare |
| <input type="checkbox"/> Adsorption Systems | <input type="checkbox"/> Condenser | <input type="checkbox"/> Mechanical Collector |
| <input type="checkbox"/> Afterburner | <input type="checkbox"/> Electrostatic Precipitator | <input type="checkbox"/> Wet Collecting System |
| <input type="checkbox"/> Other Collectors, specify | | |

Fill out and provide the **Air Pollution Control Device Sheet(s)** as **Attachment M**.

30. Provide all **Supporting Emissions Calculations** as **Attachment N**, or attach the calculations directly to the forms listed in Items 28 through 31.

31. **Monitoring, Recordkeeping, Reporting and Testing Plans.** Attach proposed monitoring, recordkeeping, reporting and testing plans in order to demonstrate compliance with the proposed emissions limits and operating parameters in this permit application. Provide this information as **Attachment O**.

- Please be aware that all permits must be practically enforceable whether or not the applicant chooses to propose such measures. Additionally, the DAQ may not be able to accept all measures proposed by the applicant. If none of these plans are proposed by the applicant, DAQ will develop such plans and include them in the permit.

32. **Public Notice.** At the time that the application is submitted, place a **Class I Legal Advertisement** in a newspaper of general circulation in the area where the source is or will be located (See 45CSR§13-8.3 through 45CSR§13-8.5 and **Example Legal Advertisement** for details). Please submit the **Affidavit of Publication** as **Attachment P** immediately upon receipt.

33. **Business Confidentiality Claims.** Does this application include confidential information (per 45CSR31)?

YES NO

- If YES, identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "**Precautionary Notice – Claims of Confidentiality**" guidance found in the **General Instructions** as **Attachment Q**.

Section III. Certification of Information

34. **Authority/Delegation of Authority.** Only required when someone other than the responsible official signs the application. Check applicable **Authority Form** below:

- | | |
|--|--|
| <input type="checkbox"/> Authority of Corporation or Other Business Entity | <input type="checkbox"/> Authority of Partnership |
| <input type="checkbox"/> Authority of Governmental Agency | <input checked="" type="checkbox"/> Authority of Limited Partnership |

Submit completed and signed **Authority Form** as **Attachment R**.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

35A. **Certification of Information.** To certify this permit application, a Responsible Official (per 45CSR§13-2.22 and 45CSR§30-2.28) or Authorized Representative shall check the appropriate box and sign below.

Certification of Truth, Accuracy, and Completeness

I, the undersigned Responsible Official / Authorized Representative, hereby certify that all information contained in this application and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry I further agree to assume responsibility for the construction, modification and/or relocation and operation of the stationary source described herein in accordance with this application and any amendments thereto, as well as the Department of Environmental Protection, Division of Air Quality permit issued in accordance with this application, along with all applicable rules and regulations of the West Virginia Division of Air Quality and W.Va. Code § 22-5-1 et seq. (State Air Pollution Control Act). If the business or agency changes its Responsible Official or Authorized Representative, the Director of the Division of Air Quality will be notified in writing within 30 days of the official change.

Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

SIGNATURE _____
(Please use blue ink)

DATE: 2/12/15
(Please use blue ink)

35B. Printed name of signee: James C. Ashby

35C. Title: Manager of Environmental Affairs

35D. E-mail: jim.ashby@arlp.com

36E. Phone: 301-334-5336

36F. FAX: 301-334-1602

36A. Printed name of contact person (if different from above): John Dubowski

36B. Title: Environmental Coordinator

36C. E-mail: john.dubowski@arlp.com

36D. Phone: 304-547-2904

36E. FAX: 304-547-2940

PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Attachment A: Business Certificate | <input checked="" type="checkbox"/> Attachment K: Fugitive Emissions Data Summary Sheet |
| <input checked="" type="checkbox"/> Attachment B: Map(s) | <input checked="" type="checkbox"/> Attachment L: Emissions Unit Data Sheet(s) |
| <input checked="" type="checkbox"/> Attachment C: Installation and Start Up Schedule | <input type="checkbox"/> Attachment M: Air Pollution Control Device Sheet(s) |
| <input checked="" type="checkbox"/> Attachment D: Regulatory Discussion | <input checked="" type="checkbox"/> Attachment N: Supporting Emissions Calculations |
| <input checked="" type="checkbox"/> Attachment E: Plot Plan | <input checked="" type="checkbox"/> Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans |
| <input checked="" type="checkbox"/> Attachment F: Detailed Process Flow Diagram(s) | <input checked="" type="checkbox"/> Attachment P: Public Notice |
| <input checked="" type="checkbox"/> Attachment G: Process Description | <input type="checkbox"/> Attachment Q: Business Confidential Claims |
| <input type="checkbox"/> Attachment H: Material Safety Data Sheets (MSDS) | <input type="checkbox"/> Attachment R: Authority Forms |
| <input checked="" type="checkbox"/> Attachment I: Emission Units Table | <input type="checkbox"/> Attachment S: Title V Permit Revision Information |
| <input checked="" type="checkbox"/> Attachment J: Emission Points Data Summary Sheet | <input checked="" type="checkbox"/> Application Fee |

Please mail an original and three (3) copies of the complete permit application with the signature(s) to the DAQ, Permitting Section, at the address listed on the first page of this application. Please DO NOT fax permit applications.

FOR AGENCY USE ONLY - IF THIS IS A TITLE V SOURCE:

- Forward 1 copy of the application to the Title V Permitting Group and:
- For Title V Administrative Amendments:
 - NSR permit writer should notify Title V permit writer of draft permit,
- For Title V Minor Modifications:
 - Title V permit writer should send appropriate notification to EPA and affected states within 5 days of receipt,
 - NSR permit writer should notify Title V permit writer of draft permit.
- For Title V Significant Modifications processed in parallel with NSR Permit revision:
 - NSR permit writer should notify a Title V permit writer of draft permit,
 - Public notice should reference both 45CSR13 and Title V permits,
 - EPA has 45 day review period of a draft permit.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

Attachment A
Business Certificate

**WEST VIRGINIA
STATE TAX DEPARTMENT
BUSINESS REGISTRATION
CERTIFICATE**

ISSUED TO:
**TUNNEL RIDGE LLC
1717 S BOULDER AVE 600
TULSA, OK 74119-4815**

BUSINESS REGISTRATION ACCOUNT NUMBER: 1050-9979

This certificate is issued on: 06/23/2011

*This certificate is issued by
the West Virginia State Tax Commissioner
in accordance with Chapter 11, Article 12, of the West Virginia Code*

*The person or organization identified on this certificate is registered
to conduct business in the State of West Virginia at the location above.*

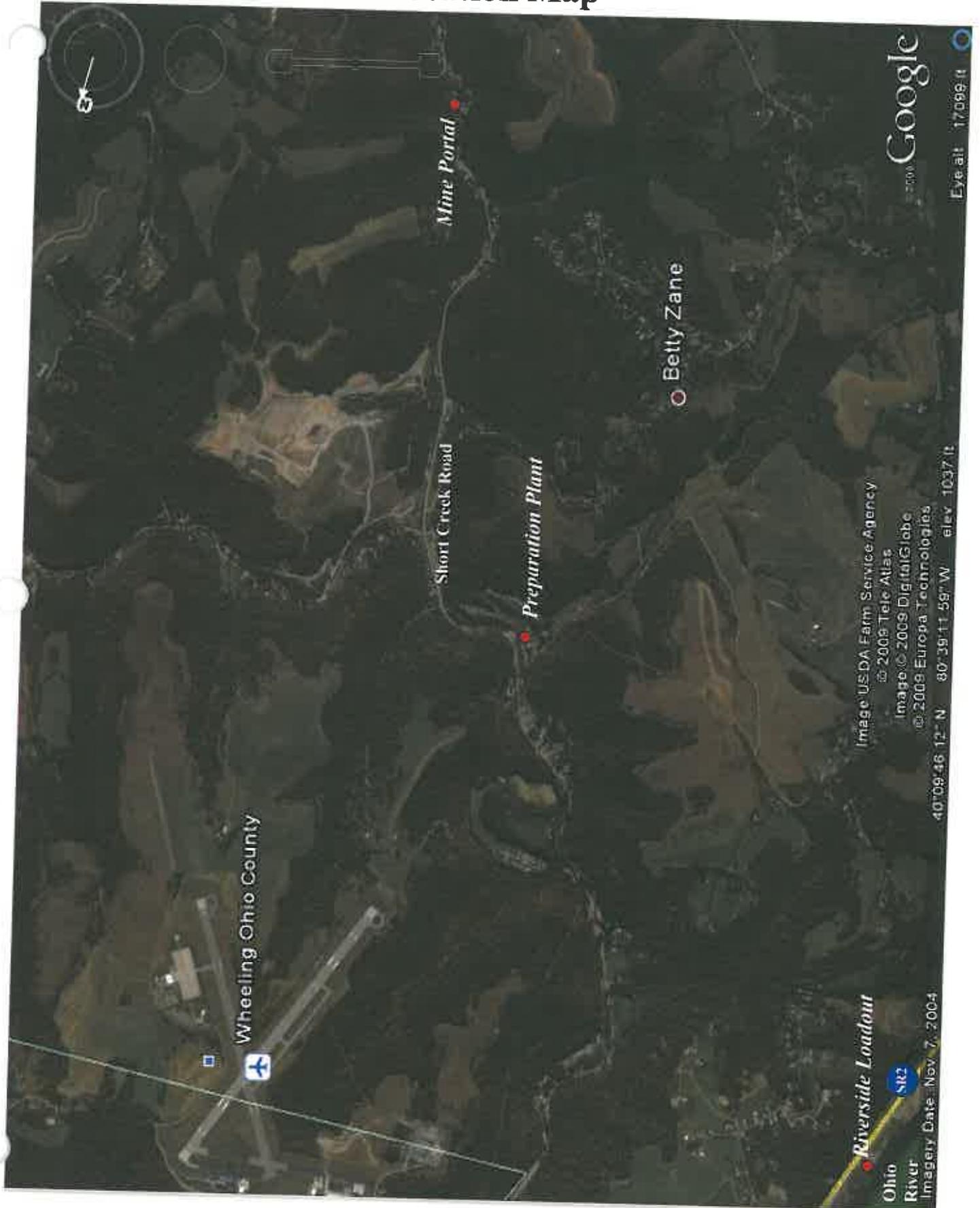
This certificate is not transferrable and must be displayed at the location for which issued.
This certificate shall be permanent until cessation of the business for which the certificate of registration
was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new
certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of
this certificate displayed at every job site within West Virginia.

Attachment B
Location Map

Location Map



Attachment C
Installation & Startup Schedule

Attachment C – Installation & Startup Schedule

No new equipment other than diesel fuel tanks will be installed. This application is to increase the throughput and potential to emit for the existing facility.

Attachment D
Regulatory Discussion

Attachment D – Regulatory Discussion

The following regulations and their requirements are expected to apply to the modified facility.

1. 45CSR6-3: Open burning is prohibited unless the Secretary of DEP grants permission.
2. 45CSR5-3.4: Limits fugitive emissions to less than 20% opacity.
3. 45CSR4-3.1: Prohibits discharges of objectionable odors.
4. 40CFR60.250 Subpart Y: Limits emission from affected facilities to less than 10% opacity.
5. 45CSR13-5.11: Requires installation and maintenance of all permitted air pollution control equipment.
6. 45CSR14: This facility's potential to emit will be 203.05 TPY of PM which is less than the threshold of 250 TPY, and will therefore not be subject to the requirements of 45CSR14.
7. 45CSR30: This facility's potential to emit will be 95.54 TPY of a regulated air pollutant (PM₁₀), including stockpile emissions (but not haulroad emissions), which is less than the 45CSR30 threshold of 100 TPY for a major source. However, due to 40 CFR 60 Subpart Y's applicability, this facility will be classified as a Title V deferred non-major source. Certified emissions statements and fees will be required.
8. 45CSR13.2.6: Grants storage tanks under 10,567 gallons capacity a "de minimis" designation provided that in aggregate the emissions of HAPs or VOCs are less than 2 TPY. Although Tunnel Ridge employs two diesel fuel tanks in excess of 10,567 gallons, it is estimated that the tanks will in aggregate with smaller tanks emit significantly less than 2 TPY of HAPs or VOCs.

Tunnel Ridge proposes to conduct opacity testing as proposed in Attachment O to verify compliance with visible emissions limitations. Tunnel Ridge also proposes to maintain all permitted pollution control equipment and does not propose to conduct open burning. In addition Tunnel Ridge will maintain a water spray truck and operate it as needed to reduce fugitive emissions from haulroads and stockpile areas.

Attachment E
Plot Plan

Attachment F
Process Flow Diagram

Attachment G
Process Description

Attachment G – Process Description

Raw coal will transfer from Slope Belt BC-1 onto a series of overland conveyors BC-3 through BC-7, which will feed the Screening Building. If there are problems with the overland belt, BC-2 may be utilized to temporarily stack coal into stockpile OS-1. Under normal conditions, raw coal Belt BC-7 will transfer the raw coal to scalping screens SCR-1 & SCR-2. Oversize material (scalp rock) will transfer to Rock Sizers CR-1 & CR-2. The coal and refuse circuits described below.

Raw Coal:

The coal that passes through the screens SCR-1 & 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 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 Silo's BS-2 and BS-3. Silos BS-2 & BS-3 will be feed 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 & 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 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 can transfer material to Stacker Belt BC-34 for placement on the refuse pile. Conveyor BC-35 can transfer 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 can transfer 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-40, 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.

Attachment I
Emissions Units Table

Attachment I

Emission Units Table

(includes all emission units and air pollution control devices
that will be part of this permit application review, regardless of permitting status)

Emission Unit ID ¹	Emission Point ID ²	Emission Unit Description	Year Installed/ Modified	Design Capacity	Type ³ and Date of Change	Control Device ⁴
Conveyors						
BC-1	BC-1	Slope Belt	2015	5,000	Modified	PE
BC-2	BC-2	Raw Coal Stacker Belt	2015	5,000	Modified	PE
BC-3	BC-3	Overland Conveyor	2015	5,000	Modified	PE
BC-4	BC-4	Overland Conveyor	2015	5,000	Modified	PE
BC-5	BC-5	Overland Conveyor	2015	5,000	Modified	PE
BC-6	BC-6	Overland Conveyor	2015	5,000	Modified	PE
BC-7	BC-7	Screening Bldg. Feed Conveyor	2015	5,000	Modified	PE
BC-8	BC-8	Raw Coal Stockpile Feed Conveyor	2015	5,000	Modified	PE
BC-9	BC-9	Raw Coal Tripper Conveyor	2015	5,000	Modified	PE
BC-10	BC-10	Optional Raw Coal Conveyor	2015	5,000	Modified	PE
BC-11	BC-11	Raw Coal Reclaim Conveyor	2015	2,200	Modified	UC
BC-12	BC-12	Plant Feed Conveyor	2015	2,000	Modified	PE
BC-13	BC-13	Direct Ship Conveyor (Optional)	2015	1,800	Modified	PE
BC-14	BC-14	Clean Coal Collecting Conveyor	2015	1,500	Modified	PE
BC-15	BC-15	Clean Coal Transfer Conveyor	2015	1,700	Modified	PE
BC-16	BC-16	Clean Coal Stacker Conveyor	2015	1,700	Modified	PE
BC-17	BC-17	Clean Coal Trap Conveyor	2015	1,700	Modified	PE
BC-18	BC-18	Clean Coal (BS-1) Silo Feed Belt	2015	1,700	Modified	PE
BC-19	BC-19	Clean Coal (BS-2) Silo Feed Belt	2015	1,700	Modified	PE
BC-20	BC-20	Clean Coal (BS-3 & 4) Tripper Belt	2015	1,700	Modified	PE
BC-21	BC-21	Clean Coal Stacking Tube Belt 1	2015	1,700	Modified	PE
BC-22	BC-22	Clean Coal Stacking Tube Belt 2	2015	1,700	Modified	PE

¹ For Emission Units (or Sources) use the following numbering system: 1S, 2S, 3S, ... or other appropriate designation.

² For Emission Points use the following numbering system: 1E, 2E, 3E, ... or other appropriate designation.

³ New, modification, removal

⁴ For Control Devices use the following numbering system: 1C, 2C, 3C, ... or other appropriate designation.

Attachment I

Emission Units Table

(includes all emission units and air pollution control devices
that will be part of this permit application review, regardless of permitting status)

Emission Unit ID ¹	Emission Point ID ²	Emission Unit Description	Year Installed/ Modified	Design Capacity	Type ³ and Date of Change	Control Device ⁴
Conveyors Continued						
BC-23	BC-23	Clean Coal Reclaim Conveyor	2015	1,700	Modified	UC
BC-24	BC-24	Clean Coal Silo (BS-3) Transfer Belt	2015	4,000	Modified	PE
BC-25	BC-25	Clean Coal Silo (BS-2) Transfer Belt	2015	4,000	Modified	PE
BC-26	BC-26	Clean Coal Silo (BS-1) Transfer Belt	2015	4,000	Modified	PE
BC-27	BC-27	Clean Coal Transfer Conveyor	2015	4,000	Modified	PE
BC-28	BC-28	Barge Loading Conveyor	2015	5,000	Modified	FE
BC-29	BC-29	Refuse Transfer Conveyor	2015	500	Modified	PE
BC-30	BC-30	Refuse Collecting Conveyor	2015	1,600	Modified	PE
BC-31	BC-31	Refuse Transfer Conveyor 1	2015	1,600	Modified	PE
BC-32	BC-32	Refuse Transfer Conveyor 2	2015	1,600	Modified	PE
BC-33	BC-33	Refuse Transfer Conveyor 1A	2015	1,600	Modified	PE
BC-34	BC-34	Refuse Stacker Belt 1A	2015	1,600	Modified	PE
BC-35	BC-35	Refuse Transfer Conveyor 2D	2015	1,600	Modified	PE
BC-36	BC-36	Refuse Stacker Belt 2D	2015	1,600	Modified	PE
BC-37	BC-37	Refuse Transfer Conveyor 2B	2015	1,600	Modified	PE
BC-38	BC-38	Refuse Transfer Conveyor 2C	2015	1,600	Modified	PE
BC-39	BC-39	Refuse Stacker Belt 2C	2015	1,600	Modified	PE
BC-40	BC-40	Refuse Stacker Belt 2B	2015	1,600	Modified	PE
Crushing & Screening						
SCR-1	SCR-1	Raw Coal Scalping Screen	2015	2,500	Modified	FE/WS
SCR-2	SCR-2	Raw Coal Scalping Screen	2015	2,500	Modified	FE/WS
SCR-3	SCR-3	Raw Coal Scalping Screen	2015	1,800	Modified	FE/WS

¹ For Emission Units (or Sources) use the following numbering system: 1S, 2S, 3S,... or other appropriate designation.

² For Emission Points use the following numbering system: 1E, 2E, 3E, ... or other appropriate designation.

³ New, modification, removal

⁴ For Control Devices use the following numbering system: 1C, 2C, 3C,... or other appropriate designation.

Attachment I

Emission Units Table

(includes all emission units and air pollution control devices
that will be part of this permit application review, regardless of permitting status)

Emission Unit ID ¹	Emission Point ID ²	Emission Unit Description	Year Installed/ Modified	Design Capacity	Type ³ and Date of Change	Control Device ⁴
Crushing & Screening Continued						
CR-1	CR-1	Raw Coal Crusher	2015	250	Modified	FE/WS
CR-2	CR-2	Raw Coal Crusher	2015	250	Modified	FE/WS
CR-3	CR-3	Raw Coal Crusher	2015	200	Modified	FE/WS
Storage						
BS-1	BS-1	Clean Coal Silo 1	2015	12,000	Modified	FE
BS-2	BS-2	Clean Coal Silo 2	2015	8,000	Modified	FE
BS-3	BS-3	Clean Coal Silo 3	2015	8,000	Modified	FE
BS-4	BS-4	Refuse Loadout Bin	2015	200	Modified	FE
OS-1	OS-1	Raw Coal Stockpile 1 (Emergency)	2015	0	Modified	MC
OS-2	OS-2	Raw Coal Stockpile 2	2015	5,985,000	Modified	MC
OS-3	OS-3	Raw Coal Stockpile 3	2015	665,000	Modified	MC
OS-4	OS-4	Raw Coal Stockpile 4	2015	5,985,000	Modified	MC
OS-5	OS-5	Raw Coal Stockpile 5 (Optional)	2015	665,000	Modified	MC
OS-6	OS-6	Clean Coal Stockpile 1	2015	452,500	Modified	MC
OS-7	OS-7	Clean Coal Stockpile 2	2015	1,130,500	Modified	MC
OS-8	OS-8	Clean Coal Stockpile 3	2015	1,130,500	Modified	MC
AST-1	AST-1	Diesel Fuel Tank	2015	12,000	Modified	None
AST-2	AST-2	Diesel Fuel Tank	2015	2,000	New	None
AST-3	AST-3	Diesel Fuel Tank	2015	520	New	None
AST-4	AST-4	Diesel Fuel Tank	2015	520	New	None
AST-5	AST-5	Diesel Fuel Tank	2015	520	New	None
AST-8	AST-8	Diesel Fuel Tank	2015	12,000	New	None

¹ For Emission Units (or Sources) use the following numbering system: 1S, 2S, 3S, ... or other appropriate designation.

² For Emission Points use the following numbering system: 1E, 2E, 3E, ... or other appropriate designation.

³ New, modification, removal

⁴ For Control Devices use the following numbering system: 1C, 2C, 3C, ... or other appropriate designation.

Attachment J
Emissions Points Data Summary Sheet

EMISSION POINTS DATA SUMMARY SHEET

Table 1: Emissions Data

Emission Point ID No. (Must match Emission Units Table & Plot Plan)	Emission Point Type ¹	Emission Unit Vented Through This Point (Must match Emission Units Table & Plot Plan)		Air Pollution Control Device (Must match Emission Units Table & Plot Plan)		Vent Time for Emission Unit (chemical processes only)		All Regulated Pollutants - Chemical Name/CAS ³ (Speciate VOCs & HAPS)	Maximum Potential Uncontrolled Emissions ⁴		Maximum Potential Controlled Emissions ⁵		Emission Form or Phase (At exit conditions, Solid, Liquid or Gas/Vapor)	Est. Method Used ⁶	Emission Concentration (ppmv or mg/m ³) ⁷
		ID No.	Source	ID No.	Device Type	Short Term ²	Max (hr/yr)		lb/hr	ton/yr	lb/hr	ton/yr			
T-1 through T-65	Transfer Points	T-1 through T-65	Coal Dust	Various	Various	N/A	N/A	PM	135.29	126.55	44.93	36.19	Solid	AP-42	N/A
SCR-1,2, & 3 CR-1 & 2	Crushing & Screening	SCR-1,2 & 3 CR-1,2	Coal Dust	FE/WS	Fully Enclosed with Water Sprays	N/A	N/A	PM	702.00	1,411.90	70.20	141.19	Solid	AP-42	N/A
Vehicle Activity	Vehicle Activity	Fugitive	Road Dust	WS	Water Truck	N/A	N/A	PM	102.25	156.41	30.68	46.92	Solid	AP-42	N/A
								PM-10	21.25	32.50	6.37	9.75	Solid	AP-42	N/A

The EMISSION POINTS DATA SUMMARY SHEET provides a summation of emissions by emission unit. Note that uncaptured process emission unit emissions are not typically considered to be fugitive and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET. Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions). Please complete the FUGITIVE EMISSIONS DATA SUMMARY SHEET for fugitive emission activities.

- Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.
- Indicate by "C" if venting is continuous. Otherwise, specify the average short-term venting rate with units, for intermittent venting (ie., 15 min/hr). Indicate as many rates as needed to clarify frequency of venting (e.g., 5 min/day, 2 days/wk).
- List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. LIST Acids, CO, CS₂, VOCs, H₂S, Inorganics, Lead, Organics, O₃, NO, NO₂, SO₂, SO₃, etc. DO NOT LIST CO₂, H₂, H₂O, N₂, O₂, and Noble Gases.
- Give maximum potential emission rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
- Give maximum potential emission rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
- Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).
- Provide for all pollutant emissions. Typically, the units of parts per million by volume (ppmv) are used. If the emission is a mineral acid (sulfuric, nitric, hydrochloric or phosphoric) use units of milligram per dry cubic meter (mg/m³) at standard conditions (68 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO₂, use units of ppmv (See 45CSR10).

Attachment K
Fugitive Emissions Data Summary Sheet

Attachment K

FUGITIVE EMISSIONS DATA SUMMARY SHEET

The FUGITIVE EMISSIONS SUMMARY SHEET provides a summation of fugitive emissions. Fugitive emissions are those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening. Note that uncaptured process emissions are not typically considered to be fugitive, and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET.

Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions).

APPLICATION FORMS CHECKLIST - FUGITIVE EMISSIONS

1.) Will there be haul road activities?

Yes No

If YES, then complete the HAUL ROAD EMISSIONS UNIT DATA SHEET.

2.) Will there be Storage Piles?

Yes No

If YES, complete Table 1 of the NONMETALLIC MINERALS PROCESSING EMISSIONS UNIT DATA SHEET.

3.) Will there be Liquid Loading/Unloading Operations?

Yes No

If YES, complete the BULK LIQUID TRANSFER OPERATIONS EMISSIONS UNIT DATA SHEET.

4.) Will there be emissions of air pollutants from Wastewater Treatment Evaporation?

Yes No

If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET.

5.) Will there be Equipment Leaks (e.g. leaks from pumps, compressors, in-line process valves, pressure relief devices, open-ended valves, sampling connections, flanges, agitators, cooling towers, etc.)?

Yes No

If YES, complete the LEAK SOURCE DATA SHEET section of the CHEMICAL PROCESSES EMISSIONS UNIT DATA SHEET.

6.) Will there be General Clean-up VOC Operations?

Yes No

If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET.

7.) Will there be any other activities that generate fugitive emissions?

Yes No

If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET or the most appropriate form.

If you answered "NO" to all of the items above, it is not necessary to complete the following table, "Fugitive Emissions Summary."

FUGITIVE EMISSIONS SUMMARY		All Regulated Pollutants ¹ Chemical Name/CAS ¹	Maximum Potential Uncontrolled Emissions ²		Maximum Potential Controlled Emissions ³		Est. Method Used ⁴
			lb/hr	ton/yr	lb/hr	ton/yr	
Haul Road/Road Dust Emissions Paved Haul Roads	PM	None	None	None	None	None	EE
	PM-10	None	None	None	None	None	EE
Unpaved Haul Roads	PM	102.25	156.41	30.68	46.92	EE	
	PM-10	21.25	32.50	6.37	9.75	EE	
Storage Pile Emissions	PM	5.86	25.67	5.86	25.67	EE	
	PM-10	2.75	12.06	2.75	12.06	EE	
Loading/Unloading Operations							
Wastewater Treatment Evaporation & Operations							
Equipment Leaks		Does not apply			Does not apply		
General Clean-up VOC Emissions							
Other							

¹ List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. LIST Acids, CO, CS₂, VOCs, H₂S, Inorganics, Lead, Organics, O₃, NO, NO₂, SO₂, SO₃, etc. DO NOT LIST CO₂, H₂, H₂O, N₂, O₂, and Noble Gases.
² Give rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
³ Give rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).
⁴ Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).

Attachment L
Emissions Unit Data Sheet

**Attachment L
FUGITIVE EMISSIONS FROM UNPAVED HAULROADS**

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

k =	Particle size multiplier	PM	
s =	Silt content of road surface material (%)	0.80	PM-10 0.36
p =	Number of days per year with precipitation >0.01 in.	10	
		150	

Item Number	Description	Number of Wheels	Mean Vehicle Weight (tons)	Mean Vehicle Speed (mph)	Miles per Trip	Maximum Trips per Hour	Maximum Trips per Year	Control Device ID Number	Control Efficiency (%)
1	Empty Rock Truck	18	15	15	0.28	12	36,711	WS	70
2	Loaded Rock Truck	18	42	15	0.28	12	36,711	WS	70
3									
4									
5									
6									
7									
8									

Source: AP-42 Fifth Edition – 13.2.2 Unpaved Roads

$$E = k \times 5.9 \times (s + 12) \times (S + 30) \times (W + 3)^{0.7} \times (w + 4)^{0.5} \times ((365 - p) + 365) = \text{lb/Vehicle Mile Traveled (VMT)}$$

Where:

k =	Particle size multiplier	PM	
s =	Silt content of road surface material (%)	0.80	PM-10 0.36
S =	Mean vehicle speed (mph)	10	
W =	Mean vehicle weight (tons)	15	
w =	Mean number of wheels per vehicle	42	
p =	Number of days per year with precipitation >0.01 in.	18	
		150	

For lb/hr: $[\text{lb} \div \text{VMT}] \times [\text{VMT} \div \text{trip}] \times [\text{Trips} \div \text{Hour}] = \text{lb/hr}$

For TPY: $[\text{lb} \div \text{VMT}] \times [\text{VMT} \div \text{trip}] \times [\text{Trips} \div \text{Hour}] \times [\text{Ton} + 2000 \text{ lb}] = \text{Tons/year}$

SUMMARY OF UNPAVED HAULROAD EMISSIONS

Item No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	38.25	58.51	11.47	17.55	8.47	12.95	2.54	3.89
2	64.00	97.90	19.20	29.37	12.78	19.55	3.83	5.87
3								
4								
5								
6								
7								
8								
TOTALS	102.25	156.41	30.68	46.92	21.25	32.50	6.37	9.75

FUGITIVE EMISSIONS FROM PAVED HAULROADS

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

I =	Industrial augmentation factor (dimensionless)	
n =	Number of traffic lanes	
s =	Surface material silt content (%)	
L =	Surface dust loading (lb/mile)	

Item Number	Description	Mean Vehicle Weight (tons)	Miles per Trip	Maximum Trips per Hour	Maximum Trips per Year	Control Device ID Number	Control Efficiency (%)
1	None						
2							
3							
4							
5							
6							
7							
8							

Source: AP-42 Fifth Edition – 11.2.6 Industrial Paved Roads

$$E = 0.077 \times I \times (4 \div n) \times (s + 10) \times (L + 1000) \times (W + 3)^{0.7} = \text{lb/Vehicle Mile Traveled (VMT)}$$

Where:

I =	Industrial augmentation factor (dimensionless)	
n =	Number of traffic lanes	
s =	Surface material silt content (%)	
L =	Surface dust loading (lb/mile)	
W =	Average vehicle weight (tons)	

For lb/hr: $[\text{lb} \div \text{VMT}] \times [\text{VMT} \div \text{trip}] \times [\text{Trips} \div \text{Hour}] = \text{lb/hr}$

For TPY: $[\text{lb} \div \text{VMT}] \times [\text{VMT} \div \text{trip}] \times [\text{Trips} \div \text{Hour}] \times [\text{Ton} + 2000 \text{ lb}] = \text{Tons/year}$

SUMMARY OF PAVED HAULROAD EMISSIONS

Item No.	Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY
1				
2				
3				
4				
5				
6				
7				
8				
TOTALS				

Attachment L
Emission Unit Data Sheet
(NONMETALLIC MINERALS PROCESSING)

Storage Activity

ID of Emission Unit	OS-1	OS-2	OS-3	OS-4	OS-5
Type Storage	OS - Open Stockpile	OS - Open Stockpile	OS - Open Stockpile	OS - Open Stockpile	OS - Open Stockpile
Material Stored	Raw Coal	Raw Coal	Raw Coal	Raw Coal	Raw Coal
Typical Moisture Content (%)	6%	6%	6%	6%	6%
Avg % of material passing through 200 mesh sieve	6%	6%	6%	6%	6%
Maximum Total Yearly Throughput in storage (tons)	0	5,985,000	665,000	5,985,000	665,000
Maximum Stockpile Base Area (ft ²)	0	238,268	55,156	238,268	62,218
Maximum Stockpile height (ft)	0	159	77	159	81
Dust control method applied to storage	N - None	N - None	N - None	N - None	N - None
Method of material load-in to bin or stockpile	MS - Mobile Conveyor	ST - Stacking Tubes	MS - Mobile Conveyor	ST - Stacking Tubes	ST - Stacking Tubes
Dust control method applied during load-in	MD - Minimization of	MD - Minimization of	MD - Minimization of	MD - Minimization of	MD - Minimization of
Method of material load-out to bin or stockpile	FE - Front Endloader	RC - Reclaim Conveyor			
Dust control method applied during load-out	N - None	N - None	N - None	N - None	N - None

Storage piles OS-1	Estimated Annual Tons	Turnover Rate (Ton/Month)	Wetted as Piled	Number of Sides Enclosed	Other Dust Control	Loading Method (Loader, Conveyor) IN/OUT
Coarse: over 1"	0	0	No	None	MD - Minimization	Radial Stacker/Endloader
Fine: 1" to ¼"	0	0				
¼" and less	0	0				
MFG. Sand	0	0				
Other, specify	0	0				

Attachment L
Emission Unit Data Sheet
(NONMETALLIC MINERALS PROCESSING)

Storage Activity

ID of Emission Unit	OS-6	OS-7	OS-8	BS-1	BS-2
Type Storage	OS - Open Stockpile	OS - Open Stockpile	OS - Open Stockpile	B - Bin or Storage Silo	B - Bin or Storage Silo
Material Stored	Clean Coal	Clean Coal	Clean Coal	Clean Coal	Clean Coal
Typical Moisture Content (%)	6%	6%	6%	6%	6%
Avg % of material passing through 200 mesh sieve	5.8%	5.8%	5.8%	5.8%	5.8%
Maximum Total Yearly Throughput in storage (tons)	452,200	1,130,500	1,130,500	2,912,168	1,935,416
Maximum Stockpile Base Area (ft ²)	31,979	58,820	58,820	N/A	N/A
Maximum Stockpile height (ft)	58	79	79	N/A	N/A
Dust control method applied to storage	N - None	N - None	N - None	Fully Enclosed	Fully Enclosed
Method of material load-in to bin or stockpile	MS - Mobile Conveyor	ST - Stacking Tubes	ST - Stacking Tubes	SS - Stationary Conveyor	SS - Stationary Conveyor
Dust control method applied during load-in	MD - Minimization of	MD - Minimization of	MD - Minimization of	MD - Minimization of	MD - Minimization of
Method of material load-out to bin or stockpile	UC - Under-Pole or Under	RC - Reclaim Conveyor	RC - Reclaim Conveyor	UC - Under-Pole or Under	UC - Under-Pole or Under
Dust control method applied during load-out	N - None	N - None	N - None	MD - Minimization of	MD - Minimization of

Storagepiles OS-2 & 4	Estimated Annual Tons (Each)	Turnover Rate (Ton/Month) (Each)	Wetted as Piled	Number of Sides Enclosed	Other Dust Control	Loading Method (Loader, Conveyor) IN/OUT
Coarse: over 1"	1,406,475	117,206	No	None	MD - Minimization	Stacking Tube/ Underground Reclaim
Fine: 1" to ¼"	2,004,975	167,081				
¼" and less	2,573,550	214,463				
MFG. Sand	0	0				
Other, specify	0	0				

Attachment L
Emission Unit Data Sheet
(NONMETALLIC MINERALS PROCESSING)

Storage Activity

ID of Emission Unit	BS-3	BS-4			
Type Storage	B - Bin or Storage Silo	B - Bin or Storage Silo			
Material Stored	Clean Coal	Clean Coal			
Typical Moisture Content (%)	6%	6%			
Avg % of material passing through 200 mesh sieve	5.8%	5.8%			
Maximum Total Yearly Throughput in storage (tons)	1,935,416	991,200			
Maximum Stockpile Base Area (ft ²)	N/A	N/A			
Maximum Stockpile height (ft)	N/A	N/A			
Dust control method applied to storage	Fully Enclosed	Fully Enclosed			
Method of material load-in to bin or stockpile	SS - Stationary Conveyor	SS - Stationary Conveyor			
Dust control method applied during load-in	MD - Minimization of Dust	MD - Minimization of Dust			
Method of material load-out to bin or stockpile	UC - Under-Pole or Under-Cover	UC - Under-Pole or Under-Cover			
Dust control method applied during load-out	MD - Minimization of Dust	MD - Minimization of Dust			

Storagepiles OS-3	Estimated Annual Tons	Turnover Rate (Ton/Month)	Wetted as Piled	Number of Sides Enclosed	Other Dust Control	Loading Method (Loader, Conveyor) IN/OUT
Coarse: over 1"	156,275	13,023	No	None	MD - Minimization of Dust	Conveyor/ Underground Reclaim
Fine: 1" to 1/4"	222,775	18,565				
1/4" and less	285,950	23,829				
MFG. Sand	0	0				
Other, specify	0	0				

Storagepiles OS-5	Estimated Annual Tons	Turnover Rate (Ton/Month)	Wetted as Piled	Number of Sides Enclosed	Other Dust Control	Loading Method (Loader, Conveyor) IN/OUT
Coarse: over 1"	156,275	13,023	No	None	MD - Minimizatio	Stacking Tube/ Underground Reclaim
Fine: 1" to ¼"	222,775	18,565				
¼" and less	285,950	23,829				
MFG. Sand	0	0				
Other, specify	0	0				
Storagepiles OS-6	Estimated Annual Tons	Turnover Rate (Ton/Month)	Wetted as Piled	Number of Sides Enclosed	Other Dust Control	Loading Method (Loader, Conveyor) IN/OUT
Coarse: over 1"	88,179	7,348	No	None	MD - Minimizatio	Stacker Belt/ Trap Feeder
Fine: 1" to ¼"	160,531	13,378				
¼" and less	203,490	16,958				
MFG. Sand	0	0				
Other, specify	0	0				
Storagepiles OS-7 & 8	Estimated Annual Tons (Each)	Turnover Rate (Ton/Month) (Each)	Wetted as Piled	Number of Sides Enclosed	Other Dust Control	Loading Method (Loader, Conveyor) IN/OUT
Coarse: over 1"	220,448	18,371	No	None	MD - Minimizatio	Stacking Tube/ Underground Reclaim
Fine: 1" to ¼"	401,328	33,444				
¼" and less	508,725	42,394				
MFG. Sand	0	0				
Other, specify	0	0				

Attachment L – Storage Tanks

A tanks emissions unit data sheet has been completed for AST-1, which is the largest tank with the highest throughput at the facility. Additionally the emissions calculation sheets as generated by EPA's TANKS program is also attached with the data sheet. Given the very low emissions from this tank, it is clear that even in aggregate with additional storage tanks at the facility, the 2 tons per year threshold for HAP's or VOC's will not be approached. Therefore emissions unit data sheets and TANKS calculations are not provided for the additional tanks at the facility. The tanks listed in Attachment I are the only tanks expected to produce emissions.

Attachment L EMISSIONS UNIT DATA SHEET STORAGE TANKS

Provide the following information for each new or modified bulk liquid storage tank as shown on the *Equipment List Form* and other parts of this application. A tank is considered modified if the material to be stored in the tank is different from the existing stored liquid.

IF USING US EPA'S TANKS EMISSION ESTIMATION PROGRAM (AVAILABLE AT www.epa.gov/tnn/tanks.html), APPLICANT MAY ATTACH THE SUMMARY SHEETS IN LIEU OF COMPLETING SECTIONS III, IV, & V OF THIS FORM. HOWEVER, SECTIONS I, II, AND VI OF THIS FORM MUST BE COMPLETED. US EPA'S AP-42, SECTION 7.1, "ORGANIC LIQUID STORAGE TANKS," MAY ALSO BE USED TO ESTIMATE VOC AND HAP EMISSIONS (<http://www.epa.gov/tnn/chief/>).

I. GENERAL INFORMATION (required)

1. Bulk Storage Area Name Battle Run Portal	2. Tank Name AST-1
3. Tank Equipment Identification No. (as assigned on <i>Equipment List Form</i>) AST-1	4. Emission Point Identification No. (as assigned on <i>Equipment List Form</i>) AST-1
5. Date of Commencement of Construction (for existing tanks) 2015	
6. Type of change <input checked="" type="checkbox"/> New Construction <input type="checkbox"/> New Stored Material <input type="checkbox"/> Other Tank Modification	
7. Description of Tank Modification (if applicable) Replaced former AST-1 to increase capacity	
7A. Does the tank have more than one mode of operation? (e.g. Is there more than one product stored in the tank?) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
7B. If YES, explain and identify which mode is covered by this application (Note: A separate form must be completed for each mode).	
7C. Provide any limitations on source operation affecting emissions, any work practice standards (e.g. production variation, etc.):	

II. TANK INFORMATION (required)

8. Design Capacity (specify barrels or gallons). Use the internal cross-sectional area multiplied by internal height. <p style="text-align: center;">12,000 gallons</p>	
9A. Tank Internal Diameter (ft) <p style="text-align: center;">8</p>	9B. Tank Internal Height (or Length) (ft) <p style="text-align: center;">32</p>
10A. Maximum Liquid Height (ft) <p style="text-align: center;">8</p>	10B. Average Liquid Height (ft) <p style="text-align: center;">4</p>
11A. Maximum Vapor Space Height (ft) <p style="text-align: center;">8</p>	11B. Average Vapor Space Height (ft) <p style="text-align: center;">4</p>
12. Nominal Capacity (specify barrels or gallons). This is also known as "working volume" and considers design liquid levels and overflow valve heights. <p style="text-align: center;">12,000</p>	

25F. Describe deck fittings; indicate the number of each type of fitting:		
ACCESS HATCH		
BOLT COVER, GASKETED:	UNBOLTED COVER, GASKETED:	UNBOLTED COVER, UNGASKETED:
AUTOMATIC GAUGE FLOAT WELL		
BOLT COVER, GASKETED:	UNBOLTED COVER, GASKETED:	UNBOLTED COVER, UNGASKETED:
COLUMN WELL		
BUILT-UP COLUMN - SLIDING COVER, GASKETED:	BUILT-UP COLUMN - SLIDING COVER, UNGASKETED:	PIPE COLUMN - FLEXIBLE FABRIC SLEEVE SEAL:
LADDER WELL		
PIP COLUMN - SLIDING COVER, GASKETED:	PIPE COLUMN - SLIDING COVER, UNGASKETED:	
GAUGE-HATCH/SAMPLE PORT		
SLIDING COVER, GASKETED:	SLIDING COVER, UNGASKETED:	
ROOF LEG OR HANGER WELL		
WEIGHTED MECHANICAL ACTUATION, GASKETED:	WEIGHTED MECHANICAL ACTUATION, UNGASKETED:	SAMPLE WELL-SLIT FABRIC SEAL (10% OPEN AREA)
VACUUM BREAKER		
WEIGHTED MECHANICAL ACTUATION, GASKETED:	WEIGHTED MECHANICAL ACTUATION, UNGASKETED:	
RIM VENT		
WEIGHTED MECHANICAL ACTUATION GASKETED:	WEIGHTED MECHANICAL ACTUATION, UNGASKETED:	
DECK DRAIN (3-INCH DIAMETER)		
OPEN:	90% CLOSED:	
STUB DRAIN		
1-INCH DIAMETER:		
OTHER (DESCRIBE, ATTACH ADDITIONAL PAGES IF NECESSARY)		

26. Complete the following section for Internal Floating Roof Tanks <input type="checkbox"/> Does Not Apply	
26A. Deck Type: <input type="checkbox"/> Bolted <input type="checkbox"/> Welded	
26B. For Bolted decks, provide deck construction:	
26C. Deck seam: <input type="checkbox"/> Continuous sheet construction 5 feet wide <input type="checkbox"/> Continuous sheet construction 6 feet wide <input type="checkbox"/> Continuous sheet construction 7 feet wide <input type="checkbox"/> Continuous sheet construction 5 × 7.5 feet wide <input type="checkbox"/> Continuous sheet construction 5 × 12 feet wide <input type="checkbox"/> Other (describe)	
26D. Deck seam length (ft)	26E. Area of deck (ft ²)
For column supported tanks:	26G. Diameter of each column:
26F. Number of columns:	

IV. SITE INFORMATION (optional if providing TANKS Summary Sheets)

27. Provide the city and state on which the data in this section are based.
28. Daily Average Ambient Temperature (°F)
29. Annual Average Maximum Temperature (°F)
30. Annual Average Minimum Temperature (°F)
31. Average Wind Speed (miles/hr)
32. Annual Average Solar Insulation Factor (BTU/(ft ² ·day))
33. Atmospheric Pressure (psia)

V. LIQUID INFORMATION (optional if providing TANKS Summary Sheets)

34. Average daily temperature range of bulk liquid:			
34A. Minimum (°F)		34B. Maximum (°F)	
35. Average operating pressure range of tank:			
35A. Minimum (psig)		35B. Maximum (psig)	
36A. Minimum Liquid Surface Temperature (°F)		36B. Corresponding Vapor Pressure (psia)	
37A. Average Liquid Surface Temperature (°F)		37B. Corresponding Vapor Pressure (psia)	
38A. Maximum Liquid Surface Temperature (°F)		38B. Corresponding Vapor Pressure (psia)	
39. Provide the following for <u>each</u> liquid or gas to be stored in tank. Add additional pages if necessary.			
39A. Material Name or Composition			
39B. CAS Number			
39C. Liquid Density (lb/gal)			
39D. Liquid Molecular Weight (lb/lb-mole)			
39E. Vapor Molecular Weight (lb/lb-mole)			

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification:	AST-1
City:	Triadelphia
State:	West Virginia
Company:	Tunnel Ridge, LLC
Type of Tank:	Horizontal Tank
Description:	12,000 gallon diesel tank

Tank Dimensions

Shell Length (ft):		32.00
Diameter (ft):		8.00
Volume (gallons):		12,000.00
Turnovers:		12.00
Net Throughput(gal/yr):		144,000.00
Is Tank Heated (y/n):	N	
Is Tank Underground (y/n):	N	

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Pittsburgh, Pennsylvania (Avg Atmospheric Pressure = 14.11 psia)

TANKS 4.0.9d
Emissions Report - Detail Format
Liquid Contents of Storage Tank

AST-1 - Horizontal Tank
Triadelphia, West Virginia

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	E-factors for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Distillate fuel oil no. 2	All	51.84	47.09	56.81	60.33	0.0049	0.0041	0.0059	130.0000			188.00	Option 1: VP50 = .0045 VP90 = .0085

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

AST-1 - Horizontal Tank
Triadelphia, West Virginia

Annual Emission Calculations	
Standing Losses (lb):	
Vapor Space Volume (cu ft):	1,4704
Vapor Density (lb/cu ft):	1,024,5184
Vapor Density (lb/cu ft):	0.0081
Vapor Space Expansion Factor:	0.0340
Vented Vapor Saturation Factor:	0.9980
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	1,024,5184
Tank Diameter (ft):	8.0000
Effective Diameter (ft):	18.0388
Vapor Space Outage (ft):	4.0000
Tank Shell Length (ft):	32.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0081
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	8.0048
Daily Avg. Liquid Surface Temp. (deg. R):	511.8051
Daily Average Ambient Temp. (deg. F):	50.3063
Ideal Gas Constant R (psia.cuft/(lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	508.6783
Tank Paint Solar Absorptance (beta):	0.1700
Daily Total Solar Insolation Factor (Btu/sqft day):	1,202.9558
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.0340
Daily Vapor Temperature Range (deg. R):	18.5141
Daily Vapor Pressure Range (psia):	0.0018
Boiler Vent Press. Setting Range (psia):	0.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	8.0048
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.0041
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.0059
Daily Avg. Liquid Surface Temp. (deg R):	511.8051
Daily Min. Liquid Surface Temp. (deg R):	508.7268
Daily Max. Liquid Surface Temp. (deg R):	516.4830
Daily Ambient Temp. Range (deg. R):	18.1600
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.9980
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	8.0048
Vapor Space Outage (ft):	4.0000
Working Losses (lb):	
Vapor Molecular Weight (lb/lb-mole):	2,1782
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	130.0000
Annual Net Throughput (gal/yr):	0.0048
Annual Turnovers:	144,000.0000
Turnover Factor:	12.0000
Tank Diameter (ft):	1.0000
Working Loss Product Factor:	8.0000
Working Loss Product Factor:	1.0000
Total Losses (lb):	3.6488

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: Annual

AST-1 - Horizontal Tank
Triadelphia, West Virginia

Components	Losses (lbs)		Total Emissions
	Working Loss	Breathing Loss	
Distillate fuel oil no. 2	2.18	1.47	3.65

Attachment N
Supporting Emissions Calculations

Attachment N

This section contains the emissions calculations for the application. An emissions calculations tool developed by WVDEP Division of Air Quality (DAQ) was used to calculate the emissions. After the inputs pages, you will find three (3) summary pages of results. The first reflects the existing potential to emit, the second reflects the proposed potential to emit, and the third page reflects the net emissions change.

Of note is that there are a few locations in the calculation sheet where the throughput columns read zero. This was done so that the coal or refuse flow path passes through the maximum number of transfer points and/or equipment to ensure that the worst case emissions scenario is reflected. Also, OS-1, BC-2, will only be used in the case of emergency requiring maintenance of the overland belt. Precipitation data was obtained from DAQ, and wind data was obtained from the Wheeling-Ohio County Airport.

2. TRANSFER POINTS (including all conveyor transfer points, equipment transfer points etc.)

k =	Particle Size Multiplier (dimensionless)	PM	PM-10
U =	Mean Wind Speed (mph)	0.7400	0.3500
		7	

Transfer Point ID No.	Transfer Point Description Include ID Numbers of all conveyors, crushers, screens, stockpiles, etc. involved	Material Moisture Content %	Maximum Transfer Rate		Control Device ID Number	Control Efficiency %
			TPH	TPY		
T-1	BC-1 to BC-2 or BC-3	6	5,000	14,000,000	FE	80
T-2	BC-2 to OS-1	6	0	0	MD	0
T-3	Truck Loading	6	0	0	MD	0
T-4	BC-3 to BC-4	6	5,000	14,000,000	FE	80
T-5	BC-4 to BC-5	6	5,000	14,000,000	FE	80
T-6	BC-5 back to BC-5	6	5,000	14,000,000	FE	80
T-7	BC-5 to BC-6	6	5,000	14,000,000	FE	80
T-8	BC-6 back to BC-6	6	5,000	14,000,000	FE	80
T-9	BC-6 to BC-7	6	5,000	14,000,000	FE	80
T-10	BC-7 to SCR-1 & SCR-2	6	5,000	14,000,000	FE	80
T-11	SCR-1 & 2 to CR-1 & 2	6	5,000	700,000	FE	80
T-11A	SCR-1 & 2 to BC-8	6	5,000	13,300,000	FE	80
T-12	CR-1 & 2 to BC-29	6	5,000	700,000	PE	50
T-13	BC-29 to BC-8	6	500	0	FE	80
T-14	BC-8 to BC-9 or OS-2	6	5,000	13,300,000	PE/ST	75
T-15	BC-9 back to BC-9 or to OS-3	6	5,000	7,315,000	PE	50
T-16	BC-9 to BC-10 or to OS-4	6	5,000	6,650,000	PE/ST	75
T-17	BC-10 to OS-5	6	5,000	665,000	PE/ST	75
T-18	OS-2 -OS-5 to BC-11	6	2,200	13,300,000	UC	80
T-19	BC-11 to BC-12 or SCR-3	6	2,200	13,300,000	FE	80
T-20A	SCR-3 to CR-3	6	1,800	1,330,000	FE	80
T-20B	SCR-3 to BC-12	6	1,800	11,970,000	FE	80
T-20C	SCR-3 to BC-13	6	1,800	0	FE	80
T-21	CR-3 to BC-12	6	200	1,330,000	FE	80
T-22	BC-13 to Sampler	6	18	0	PE	50
T-23	Sampler back to BC-13	6	18	0	PE	50
T-24	BC-12 to Wet Wash Plant	6	2,000	13,300,000	FE	80
T-25	Wet Wash Plant to BC-14	6	1,500	9,044,000	FE	80
T-26	BC-14 to Sampler	6	15	633,080	PE	50
T-27	Sampler back to BC-14	6	15	633,080	PE	50
T-28	BC-13 to BC-15 or BC-18	6	1,800	0	FE	80
T-29	BC-14 to BC-15 or BC-18	6	1,500	9,044,000	FE	80
T-30	BC-15 to BC-16	6	1,700	452,200	PE	50
T-31	BC-16 to OS-6	6	1,700	452,200	PE	50
T-32	OS-6 to BC-17	6	1,700	452,200	PE	50
T-33	BC-17 to BC-18	6	1,700	452,200	PE	50
T-34	BC-18 to BC-19 or BS-1	6	1,700	9,044,000	PE	50
T-35	BC-19 to BC-20 or BS-2	6	1,700	6,131,832	PE	50
T-36	BC-20 back to BS-20 or to BS-3	6	1,700	4,196,416	PE	50
T-37	BC-20 to BC-21	6	1,700	2,261,000	PE	50
T-38	BC-21 to BC-22 or OS-7	6	1,700	2,261,000	PE/ST	75
T-39	BC-22 to OS-8	6	1,700	1,130,500	PE/ST	75
T-40	OS-7 & OS-8 to BC-23	6	4,000	2,261,000	UC	80
T-41	BC-23 to BC-27	6	4,000	2,261,000	FE	80
T-42	BS-3 to BC-24	6	4,000	1,935,416	FE	80
T-43	BC-24 to BC-27	6	4,000	1,935,416	PE	50
T-44	BS-2 to BC-25	6	4,000	1,935,416	FE	80
T-45	BC-25 to BC-27	6	4,000	1,935,416	PE	50
T-46	BS-1 to BC-26	6	4,000	2,912,168	FE	80
T-47	BC-26 to BC-27	6	4,000	2,912,168	PE	50
T-48	BC-27 to BC-28	6	4,000	6,131,832	PE	50
T-49	BC-28 to Sampler	6	40	633,080	PE	50
T-50	Sampler back to BC-28	6	40	633,080	PE	50
T-51	BC-28 to Barge	6	5,000	9,044,000	TC	75
T-52	BC-29 to BC-30	6	500	700,000	PE	50
T-53	BC-30 to BC-31	6	1,600	4,956,000	PE	50
T-54	BC-31 to BC-32	6	1,600	4,956,000	PE	50
T-55	BC-32 back to BC-32 or to BC-33	6	1,600	4,956,000	PE	50
T-56	BC-33 to BC-34	6	1,600	1,982,400	PE	50
T-57	BC-34 to Refuse	6	1,600	1,982,400	MD	0
T-58	BC-32 to BC-35 or BC-37	6	1,600	2,973,600	PE	50
T-59	BC-35 to BC-36	6	1,600	0	PE	50
T-60	BC-36 to Refuse	6	1,600	0	MD	0

T-61	BC-37 to BC-39 or BC-41	6	1,600	2,973,600	PE	50
T-62	BC-39 to BC-40	6	1,600	1,982,400	PE	50
T-63	BC-40 to Refuse	6	1,600	1,982,400	MD	0
T-64	BC-41 to BS-4	6	1,600	991,200	PE	50
T-65	BS-4 to Truck	6	1,600	991,200	MD	0

3. WIND EROSION OF STOCKPILES (including all stockpiles of raw coal, clean coal, coal refuse, etc.)

p =	number of days per year with precipitation >0.01 inch	150
f =	percentage of time that the unobstructed wind speed exceeds 12 mph at the mean pile height	20

Source ID No.	Stockpile Description	Silt Content of Material %	Stockpile base area Max. sqft	Control Device ID Number	Control Efficiency %
OS-1	Temporary Stock Pile	6	0	MC	0
OS-2	Raw Coal Stockpile 1	6	238,268	MC	0
OS-3	Raw Coal Stockpile 2	6	55,156	MC	0
OS-4	Raw Coal Stockpile 3	6	238,268	MC	0
OS-5	Raw Coal Stockpile 4	6	62,218	MC	0
OS-6	Clean Coal Stockpile 1	5.8	31,979	MC	0
OS-7	Clean Coal Stockpile 2	5.8	58,820	MC	0
OS-8	Clean Coal Stockpile 3	5.8	58,820	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	150

Item Number	Description	Number of wheels	Mean Vehicle Weight(tons)	Mean Vehicle Speed (mph)	Miles per Trip	Maximum Trips Per Hour	Maximum Trips Per Year	Control Device ID Number	Control Efficiency %
1	Empty Rock Trucks	18	15	15	0.28	12	36,711	WS	70
2	Loaded Rock Trucks	18	42	15	0.28	12	36,711	WS	70
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/m ²)	70
P =	number of days per year with precipitation >0.01 inch	150

Item Number	Description	Mean Vehicle Weight (tons)	Miles per Trip	Maximum Trips Per Hour	Maximum Trips Per Year	Control Device ID Number	Control Efficiency %
1	None						
2							
3							
4							
5							
6							
7							
8							

EMISSIONS SUMMARY

EXISTING

Name of applicant: Tunnel Ridge, LLC
 Name of plant: Tunnel Ridge Mine

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

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

FUGITIVE EMISSIONS				
<i>Stockpile Emissions</i>	5.40	23.64	5.40	23.64
<i>Unpaved Haulroad Emissions</i>	102.25	111.72	30.68	33.52
<i>Paved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
Fugitive Emissions Total	107.65	135.36	36.07	57.16

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	702.00	1,008.50	70.20	100.85
<i>Transfer Point Emissions</i>	135.29	90.39	53.20	34.12
Point Source Emissions Total*	837.29	1,098.89	123.40	134.97

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

Facility Emissions Total	944.94	1,234.26	159.47	192.13
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***Facility Potential to Emit (PTE) (Baseline Emissions) = 134.97**
(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>	2.54	11.11	2.54	11.11
<i>Unpaved Haulroad Emissions</i>	21.25	23.21	6.37	6.96
<i>Paved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
Fugitive Emissions Total	23.78	34.33	8.91	18.08

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	329.94	474.00	32.99	47.40
<i>Transfer Point Emissions</i>	63.99	42.75	25.16	16.14
Point Source Emissions Total*	393.93	516.75	58.16	63.54

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

Facility Emissions Total	417.71	551.07	67.07	81.61
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EMISSIONS SUMMARY

Name of applicant: Tunnel Ridge, LLC
 Name of plant: Tunnel Ridge Mine

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

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

FUGITIVE EMISSIONS				
<i>Stockpile Emissions</i>	5.86	25.67	5.86	25.67
<i>Unpaved Haulroad Emissions</i>	102.25	156.41	30.68	46.92
<i>Paved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
Fugitive Emissions Total	108.11	182.08	36.54	72.59

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	702.00	1,411.90	70.20	141.19
<i>Transfer Point Emissions</i>	135.29	126.55	44.93	36.19
Point Source Emissions Total*	837.29	1,538.45	115.13	177.38

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

Facility Emissions Total	945.40	1,720.53	151.66	249.97
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***Facility Potential to Emit (PTE) (Baseline Emissions) = 177.38**
(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>	2.75	12.06	2.75	12.06
<i>Unpaved Haulroad Emissions</i>	21.25	32.50	6.37	9.75
<i>Paved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
Fugitive Emissions Total	24.00	44.56	9.13	21.81

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	329.94	663.59	32.99	66.36
<i>Transfer Point Emissions</i>	63.99	59.86	21.25	17.12
Point Source Emissions Total*	393.93	723.45	54.24	83.48

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

Facility Emissions Total	417.93	768.01	63.37	105.29
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EMISSIONS SUMMARY

NET CHANGE

Name of applicant: Tunnel Ridge, LLC
 Name of plant: Tunnel Ridge Mine

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

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

FUGITIVE EMISSIONS				
<i>Stockpile Emissions</i>	0.46	2.03	0.46	2.03
<i>Unpaved Haulroad Emissions</i>	0.00	44.69	0.00	13.41
<i>Paved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
Fugitive Emissions Total	0.46	46.71	0.46	15.43

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	0.00	403.40	0.00	40.34
<i>Transfer Point Emissions</i>	0.00	36.16	(8.27)	2.07
Point Source Emissions Total*	0.00	439.56	(8.27)	42.41

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

Facility Emissions Total	0.46	486.27	(7.81)	57.84
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***Facility Potential to Emit (PTE) (Baseline Emissions) = 42.41**
(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>	0.22	0.95	0.22	0.95
<i>Unpaved Haulroad Emissions</i>	0.00	9.29	0.00	2.79
<i>Paved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
Fugitive Emissions Total	0.22	10.24	0.22	3.74

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	0.00	189.60	0.00	18.96
<i>Transfer Point Emissions</i>	0.00	17.10	(3.91)	0.98
Point Source Emissions Total*	0.00	206.70	(3.91)	19.94

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

Facility Emissions Total	0.22	216.94	(3.69)	23.68
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1. Emissions From CRUSHING AND SCREENING

1a. Primary Crushing

Primary Crusher ID Number	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
CR-1	5.00	3.50	0.50	0.35	2.35	1.65	0.24	0.16
CR-2	5.00	3.50	0.50	0.35	2.35	1.65	0.24	0.16
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	10.00	7.00	1.00	0.70	4.70	3.29	0.47	0.33

1b. Secondary and Tertiary Crushing

Secondary & Tertiary Crusher ID	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
CR-3	12.00	39.90	1.20	3.99	5.64	18.75	0.56	1.88
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	12.00	39.90	1.20	3.99	5.64	18.75	0.56	1.88

1c. Screening

Screen ID Number	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
SCR-1	250.00	350.00	25.00	35.00	117.50	164.50	11.75	16.45
SCR-2	250.00	350.00	25.00	35.00	117.50	164.50	11.75	16.45
SCR-3	180.00	665.00	18.00	66.50	84.60	312.55	8.46	31.26
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	680.00	1365.00	68.00	136.50	319.60	641.55	31.96	64.16

Crushing and Screening	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
TOTAL	702.00	1411.90	70.20	141.19	329.94	663.59	32.99	66.36

1. Emissions From CRUSHING AND SCREENING (Continued)

EMISSION FACTORS

source: Air Pollution Engineering Manual and References
(lb/ton of material throughput)

PM	
Primary Crushing	0.02
Tertiary Crushing	0.06
Screening	0.1

PM-10	
Primary Crushing	0.0094
Tertiary Crushing	0.0282
Screening	0.047

2. Emissions From TRANSFER POINTS

Transfer Point ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
T-1	3.94	5.51	0.79	1.10	1.86	2.61	0.37	0.52
T-2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T-3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T-4	3.94	5.51	0.79	1.10	1.86	2.61	0.37	0.52
T-5	3.94	5.51	0.79	1.10	1.86	2.61	0.37	0.52
T-6	3.94	5.51	0.79	1.10	1.86	2.61	0.37	0.52
T-7	3.94	5.51	0.79	1.10	1.86	2.61	0.37	0.52
T-8	3.94	5.51	0.79	1.10	1.86	2.61	0.37	0.52
T-9	3.94	5.51	0.79	1.10	1.86	2.61	0.37	0.52
T-10	3.94	5.51	0.79	1.10	1.86	2.61	0.37	0.52
T-11	3.94	0.28	0.79	0.06	1.86	0.13	0.37	0.03
T-11A	3.94	5.24	0.79	1.05	1.86	2.48	0.37	0.50
T-12	3.94	0.28	1.97	0.14	1.86	0.13	0.93	0.07
T-13	0.39	0.00	0.08	0.00	0.19	0.00	0.04	0.00
T-14	3.94	5.24	0.98	1.31	1.86	2.48	0.47	0.62
T-15	3.94	2.88	1.97	1.44	1.86	1.36	0.93	0.68
T-16	3.94	2.62	0.98	0.65	1.86	1.24	0.47	0.31
T-17	3.94	0.26	0.98	0.07	1.86	0.12	0.47	0.03
T-18	1.73	5.24	0.35	1.05	0.82	2.48	0.16	0.50
T-19	1.73	5.24	0.35	1.05	0.82	2.48	0.16	0.50
T-20A	1.42	0.52	0.28	0.10	0.67	0.25	0.13	0.05
T-20B	1.42	4.71	0.28	0.94	0.67	2.23	0.13	0.45
T-20C	1.42	0.00	0.28	0.00	0.67	0.00	0.13	0.00
T-21	0.16	0.52	0.03	0.10	0.07	0.25	0.01	0.05
T-22	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00
T-23	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00
T-24	1.58	5.24	0.32	1.05	0.75	2.48	0.15	0.50
T-25	1.18	3.56	0.24	0.71	0.56	1.68	0.11	0.34
T-26	0.01	0.25	0.01	0.12	0.01	0.12	0.00	0.06
T-27	0.01	0.25	0.01	0.12	0.01	0.12	0.00	0.06
T-28	1.42	0.00	0.28	0.00	0.67	0.00	0.13	0.00
T-29	1.18	3.56	0.24	0.71	0.56	1.68	0.11	0.34
T-30	1.34	0.18	0.67	0.09	0.63	0.08	0.32	0.04
T-31	1.34	0.18	0.67	0.09	0.63	0.08	0.32	0.04
T-32	1.34	0.18	0.67	0.09	0.63	0.08	0.32	0.04
T-33	1.34	0.18	0.67	0.09	0.63	0.08	0.32	0.04
T-34	1.34	3.56	0.67	1.78	0.63	1.68	0.32	0.84
T-35	1.34	2.42	0.67	1.21	0.63	1.14	0.32	0.57
T-36	1.34	1.65	0.67	0.83	0.63	0.78	0.32	0.39
T-37	1.34	0.89	0.67	0.45	0.63	0.42	0.32	0.21
T-38	1.34	0.89	0.33	0.22	0.63	0.42	0.16	0.11
T-39	1.34	0.45	0.33	0.11	0.63	0.21	0.16	0.05
T-40	3.15	0.89	0.63	0.18	1.49	0.42	0.30	0.08
T-41	3.15	0.89	0.63	0.18	1.49	0.42	0.30	0.08
T-42	3.15	0.76	0.63	0.15	1.49	0.36	0.30	0.07
T-43	3.15	0.76	1.58	0.38	1.49	0.36	0.75	0.18
T-44	3.15	0.76	0.63	0.15	1.49	0.36	0.30	0.07
T-45	3.15	0.76	1.58	0.38	1.49	0.36	0.75	0.18
T-46	3.15	1.15	0.63	0.23	1.49	0.54	0.30	0.11
T-47	3.15	1.15	1.58	0.57	1.49	0.54	0.75	0.27
T-48	3.15	2.42	1.58	1.21	1.49	1.14	0.75	0.57
T-49	0.03	0.25	0.02	0.12	0.01	0.12	0.01	0.06

2. Emissions From TRANSFER POINTS (continued)

Transfer Point ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
T-50	0.03	0.25	0.02	0.12	0.01	0.12	0.01	0.06
T-51	3.94	3.56	0.98	0.89	1.86	1.68	0.47	0.42
T-52	0.39	0.28	0.20	0.14	0.19	0.13	0.09	0.07
T-53	1.26	1.95	0.63	0.98	0.60	0.92	0.30	0.46
T-54	1.26	1.95	0.63	0.98	0.60	0.92	0.30	0.46
T-55	1.26	1.95	0.63	0.98	0.60	0.92	0.30	0.46
T-56	1.26	0.78	0.63	0.39	0.60	0.37	0.30	0.18
T-57	1.26	0.78	1.26	0.78	0.60	0.37	0.60	0.37
T-58	1.26	1.17	0.63	0.59	0.60	0.55	0.30	0.28
T-59	1.26	0.00	0.63	0.00	0.60	0.00	0.30	0.00
T-60	1.26	0.00	1.26	0.00	0.60	0.00	0.60	0.00
T-61	1.26	1.17	0.63	0.59	0.60	0.55	0.30	0.28
T-62	1.26	0.78	0.63	0.39	0.60	0.37	0.30	0.18
T-63	1.26	0.78	1.26	0.78	0.60	0.37	0.60	0.37
T-64	1.26	0.39	0.63	0.20	0.60	0.18	0.30	0.09
T-65	1.26	0.39	1.26	0.39	0.60	0.18	0.60	0.18
TOTALS	135.29	126.55	44.93	36.19	63.99	59.86	21.25	17.12

Source:

AP-42 Fifth Edition

13.2.4 Aggregate Handling and Storage Piles

Emissions From Batch Drop

$$E = k * (0.0032) * [(U/5)^{1.3}] / [(M/2)^{1.4}] = \text{pounds/ton}$$

Where:

		PM	PM-10
k =	Particle Size Multiplier (dimensionless)	0.7400	0.3500
U =	Mean Wind Speed (mph)		
M =	Material Moisture Content (%)		

Assumptions:

k - Particle size multiplier

For PM (< or equal to 30um) k = 0.74

For PM-10 (< or equal to 10um) k = 0.35

For PM $E(M) = 0.003667 * [1 / ((M/2)^{1.4})] = \text{pounds/ton}$

For PM-10 $E(M) = 0.001735 * [1 / ((M/2)^{1.4})] = \text{pounds/ton}$

For lb/hr $[\text{lb/ton}] * [\text{ton/hr}] = [\text{lb/hr}]$

For Tons/year $[\text{lb/ton}] * [\text{ton/yr}] * [\text{ton}/2000\text{lb}] = [\text{ton/yr}]$



C

Q

C

3. Emissions From WIND EROSION OF STOCKPILES

Stockpile ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
OS-1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OS-2	1.89	8.28	1.89	8.28	0.89	3.89	0.89	3.89
OS-3	0.44	1.92	0.44	1.92	0.21	0.90	0.21	0.90
OS-4	1.89	8.28	1.89	8.28	0.89	3.89	0.89	3.89
OS-5	0.49	2.16	0.49	2.16	0.23	1.02	0.23	1.02
OS-6	0.25	1.07	0.25	1.07	0.12	0.50	0.12	0.50
OS-7	0.45	1.98	0.45	1.98	0.21	0.93	0.21	0.93
OS-8	0.45	1.98	0.45	1.98	0.21	0.93	0.21	0.93
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	5.86	25.67	5.86	25.67	2.75	12.06	2.75	12.06

Source:

Air Pollution Engineering Manual

Storage Pile Wind Erosion (Active Storage)

$$E = 1.7 * [s/1.5] * [(365-p)/235] * [f/15] = (\text{lb/day/acre})$$

Where:

s =	silt content of material
p =	number of days with >0.01 inch of precipitation per year
f =	percentage of time that the unobstructed wind speed exceeds 12 mph at the mean pile height

For PM $E(s) = 1.382506 * s = \text{lb/day/acre}$

For PM-10 $E(s) = 0.649778 * s = \text{lb/day/acre}$

For lb/hr $[\text{lb/day/acre}] * [\text{day}/24\text{hr}] * [\text{base area of pile (acres)}] = \text{lb/hr}$

For Ton/yr $[\text{lb/day/acre}] * [365\text{day/yr}] * [\text{Ton}/2000\text{lb}] * [\text{base area of pile (acres)}] = \text{Ton/yr}$

4. Emissions From UNPAVED HAULROADS

Item No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	38.25	58.51	11.47	17.55	8.47	12.95	2.54	3.89
2	64.00	97.90	19.20	29.37	12.78	19.55	3.83	5.87
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	102.25	156.41	30.68	46.92	21.25	32.50	6.37	9.75

Source:

AP-42 9/98 Edition

13.2.2 Unpaved Roads

Emission Estimate For Unpaved Haulroads at Industrial Sites (equation 1)

$$E = [(k*(s/12)^a * (W/3)^b) / ((M_{dry}/0.2)^c)] * [(365-p)/365] = \text{lb / Vehicle Mile Traveled (VMT)}$$

Where:

		PM	PM-10
k =	particle size multiplier	10.00	2.60
a =	empirical constant	0.8	0.8
b =	empirical constant	0.5	0.4
c =	empirical constant	0.4	0.3
M _{dry} =	surface material moisture content (%) - dry conditions	0.2	
p =	number of days with at least 0.01 inches of precipitation	150	
s =	silt content of road surface material (%)	10	
W =	Mean vehicle weight (tons)		

5. Emissions From INDUSTRIAL PAVED HAULROADS

Item No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source:

AP-42 10/01 Edition

13.2.1 PAVED ROADS

Emission Estimate For Paved Haulroads

$$E = k * [sL/2]^{0.65} * [W/3]^{1.5} * [1 - (P / (2*N))] = \text{lb / Vehicle Mile Traveled (VMT)}$$

Where:

		PM	PM-10
k =	particle size multiplier	0.082	0.016
sL =	road surface silt loading, (g/m ²)	70	
P =	number of days per year with precipitation >0.01 inch	150	
N =	number of days in averaging period	365	
W =	average vehicle weight, (ton)		

Raw Coal Stockpile Calculations

Stockpiles	Maximum Yearly Tonnage	Average Tons Per Day	Maximum Number of Days of Stockpiling Required	Max Tons per Pile to Permit	Pitt-8 Seam Coal Densities
OS-1 Raw	0	0	0	0	Raw 65
OS-2 Raw	5,985,000	16,397	25	409,932	Clean 60
OS-3 Raw	665,000	1,822	25	45,548	
OS-4 Raw	5,985,000	16,397	25	409,932	
OS-5 Raw	665,000	1,822	30	54,658	
OS-6 Clean	452,200	1,239	15	18,584	
OS-7 Clean	1,130,500	3,097	15	46,459	
OS-8 Clean	1,130,500	3,097	15	46,459	

Given Density: **65 lb/cu. Ft.**
 Angle of Repose: From Thomas J. Glover, Pocket Reference, 3rd Edition

height	angle of repose	diameter	radius	area	volume	tons
76.50	30	265.00	132.50	55,156.16	1,406,482	45,710.7
81.25	30	281.46	140.73	62,218.26	1,685,078	54,765.0
159.00	30	559.79	275.40	238,267.81	12,628,194	410,416.3

Height = Given
 Diameter = (Height/tangent of the angle of repose) x 2
 Radius = Diameter/2
 Area = pi x radius squared
 Volume = 1/3 area x height
 Tons = Volume x Density /2000

Clean Coal Stockpile Calculations

Stockpiles	Maximum Yearly Tonnage	Average Tons Per Day	Maximum Number of Days of Stockpiling Required	Max Tons per Pile to Permit	Pitt-8 Seam Coal Densities
OS-1 Raw	0	0	0	0	Raw 65
OS-2 Raw	5,985,000	16,397	25	409,932	Clean 60
OS-3 Raw	665,000	1,822	25	45,548	
OS-4 Raw	5,985,000	16,397	25	409,932	
OS-5 Raw	665,000	1,822	30	54,658	
OS-6 Clean	452,200	1,239		18,584	
OS-7 Clean	1,130,500	3,097	15	46,459	
OS-8 Clean	1,130,500	3,097	15	46,459	

Given Density: 60 lb/cu. Ft.
 Angle of Repose: From Thomas J. Glover, Pocket Reference, 3rd Edition

height	angle of repose	diameter	radius	area	volume	tons
58.25	30	201.78	100.89	31,978.86	620,923	18,627.7
79.00	30	273.66	136.83	58,820.04	1,548,928	46,467.8

Height = Given
 Diameter = (Height/tangent of the angle of repose) x 2
 Radius = Diameter/2
 Area = pi x radius squared
 Volume = 1/3 area x height
 Tons = Volume x Density /2000

Note: Clean Piles are smaller, because clean tons are preferentially placed into silos.

Attachment O
Monitoring/Recordkeeping/Reporting/Testing
Plans

Attachment O – Monitoring/Recordkeeping/Reporting/Testing

Tunnel Ridge, LLC proposes to conduct monitoring, recordkeeping, reporting, and testing as outlined in permit R13-2790A and the submitted and approved Fugitive Coal Dust Emissions Control Plan.

Attachment P
Public Notice

EXAMPLE LEGAL ADVERTISEMENT

Publication of a proper Class I legal advertisement is a requirement of the application process. In the event the applicant's legal advertisement fails to follow the requirements of 45CSR 13 (45-13-8) or the requirements of Chapter 59, Article 3, of the West Virginia Code, the application will be considered incomplete and no further review of the application will occur.

The applicant, utilizing the format for the Class I legal advertisement appearing below, shall cause such legal advertisement to appear a minimum of one (1) day in the newspaper most commonly read in the area where the facility exists or will be constructed. The notice must be published no earlier than five (5) working days of receipt by this office of your application. The original affidavit of publication must be received by this office no later than the last day of the public comment period.

The advertisement shall contain, at a minimum, the name of the applicant, the type and location of the source, the type and amount of air pollutants that will be discharged, the nature of the permit being sought, the proposed start-up date for the source and a contact telephone number for more information.

The location of the source should be as specific as possible starting with: 1.) the street address of the source; 2.) the nearest street or road; 3.) the nearest town or unincorporated area, 4.) the county, and 5.) latitude and longitude coordinates.

Types and amounts of pollutants discharged must include all regulated pollutants (PM, PM₁₀, VOC, SO₂, Xylene, etc.) and their potential to emit or the permit level being sought in units of tons per year (including fugitive emissions).

In the event the 30th day is a Saturday, Sunday, or legal holiday, the comment period will be extended until 5:00 p.m. on the following regularly scheduled business day.

AIR QUALITY PERMIT NOTICE Notice of Application

Notice is given that Tunnel Ridge, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Modification for a Coal Mine, Preparation Plant, and Loadout located on Short Creek Road, near Betty Zane, in Ohio County, West Virginia. The latitude and longitude coordinates are: 40.154750° latitude, -80.657231° longitude.

The applicant estimates the increased potential to discharge the following Regulated Air Pollutants will be: 57.84 TPY of PM and 23.68 TPY of PM-10.

Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.

Dated this the 26th day of January, 2015.

By: Tunnel Ridge, LLC
Dwight Kreiser
Vice President of Operations
2596 Battle Run Road
Triadelphia, WV 26059

Attachment R
Authority Forms

POWER OF ATTORNEY

TUNNEL RIDGE, LLC

TO

JAMES C. ASHBY

AUGUST 23, 2001

EXPIRES: INDEFINITE

KNOW ALL MEN BY THESE PRESENTS: That Tunnel Ridge, LLC organized and existing under the laws of the State of Delaware (the "Company"), has and does hereby appoint James C. Ashby, its true and lawful Attorney in Fact with power and authority, for and on behalf, and in the name of the Company business, environmental applications for air, waste, and water permits, applications for surface disturbance mining permits, renewals thereof, or amendments or supplements thereto, certificates or other instruments directly related to such applications, renewals, amendments or supplements required to be filed with any local, state or federal governments agency directly related to the Company coal mining operations.

The Attorney herein appointed shall be authorized to act hereunder from the date hereof only so long as such Attorney shall remain an employee or authorized agent of the Company, or until such earlier time as this instrument has been revoked, annulled, rescinded or set aside by an instrument or revocation filed with the Company, whichever first occurs.

IN WITNESS WHEREOF, the Company has caused this Power of Attorney to be executed on its behalf, and its seal to be hereunto affixed and attested, in the County of Tulsa, State of Oklahoma, as of the day and year first above written, by the undersigned, Thomas L. Pearson, Esq. the duly authorized Secretary and General Counsel of Tunnel Ridge, LLC.

Tunnel Ridge, LLC

BY: Thomas L. Pearson
Thomas L. Pearson, Esq.

STATE OF OKLAHOMA)
) SS.
COUNTY OF TULSA)

Before me, the undersigned, a Notary Public in and for said County and State, on this 23rd day of August, 2001, personally appeared Thomas L. Pearson, Esq., to me known to be the identical person who executed the within and forgoing instrument as Secretary and General Counsel of Tunnel Ridge, LLC and acknowledged to me that he executed the same as his free and voluntary act and deed and as the free and voluntary act and deed of the corporation for the uses and purposes therein stated.

Given under my hand and seal of office on the day and year first above written.

SEAL

Carol D. Gizzi
Notary Public

My Commission Expires: 13 Aug 2003