

PERMIT TO CONSTRUCT APPLICATION

The Marshall County Coal Company The Marshall County Preparation Plant

CCP Beltline Project - Phase II

Prepared By:

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Project 173601.0072



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Table 1-1. Project Potential Emissions Increases 1

1.1. INTRODUCTION

The Marshall County Coal Company (MCCC) operates a coal preparation plant located in Marshall County near Moundsville, West Virginia (referred to as the Marshall County Preparation Plant). The Marshall County Preparation Plant is currently operating in accordance with West Virginia Department of Environmental Protection (WVDEP) Division of Air Quality (DAQ) state operating permit R13-2177F, issued on February 1, 2016.

With this application, MCCC is requesting authorization to construct equipment associated with Phase II of the coal combustion project (CCP) beltline project. The Phase I equipment was approved as part of R13-2177F. Details regarding Phase II of the proposed project are found in Section 1.2 below. In addition to the requesting authorization of the equipment described in Section 1.2 below, MCCC requests that WVDEP update the R13 permit to reflect the current owner/operator and facility name (i.e., The Marshall County Coal Company and The Marshall County Preparation Plant).

1.2. OVERVIEW OF PROPOSED PROJECT

Under Phase I of the CCP beltline project, a barge mounted crane and unloading hopper were installed to unload CCP from barges. The CCP is conveyed to a truck bin via a series of 4 conveyors. The truck bin then dump into haul trucks that transport the CCP to the existing refuse disposal area #1. With this application, MCCC is requesting approval to construct equipment that will allow the facility to convey and haul CCP to the #2 refuse disposal area. The proposed equipment includes:

- > Three (3) conveyors, each rated at 1,600 tons per hour (tph); and
- > One (1) refuse truck bin.

1.3. PROJECT POTENTIAL TO EMIT (PTE)

The proposed project will result in an increase in potential emissions of PM, PM₁₀, and PM_{2.5}. Emissions increases are attributable to the new transfer points associated with the installation of the new equipment as well as the increased haul roads traffic associated with transporting CCP from the new truck bin to the refuse disposal area #2. Attachment N provides the detailed methodology for calculating these emissions increases. Additionally, Table 1-1 presents the facility-wide increases in potential emissions attributable to the proposed project.

	РМ	PM10	PM _{2.5}
	(tpy)	(tpy)	(tpy)
Transfer Points	0.16	0.07	0.01
Haul Roads	238.26	67.91	6.79
TOTAL	238.41	67.99	6.80
TOTAL (without roadways)	0.16	0.07	0.01

Table 1-1.	Project	Potential	Emissions	Increases
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1.4. ORGANIZATION OF APPLICATION

This application to modify Permit to Construct R13-2177F contains the following elements:

- Section 2: Regulatory Applicability
- Section 3: WVDAQ Application Forms
- > Attachment A: MCCC's West Virginia Business Certificate
- Attachment B: Area Map
- > Attachment C: Schedule for the Planned Installation and Start-Up of New Equipment
- Attachment D: Regulatory Applicability Analysis
- Attachment E: Plot Plan of the Facility
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- Attachment M: Air Pollution Control Device Sheet
- > Attachment N: Detailed Emission Calculations
- Attachment O: Monitoring, Recordkeeping, Reporting, and Testing Plans
- Attachment P: Affidavit of Publication

This section documents the applicability determinations made for federal and state air quality regulations that potentially apply to the proposed modification of the Marshall County Preparation Plant. Applicability or non-applicability of the following regulatory programs is addressed:

- Prevention of Significant Deterioration (PSD);
- > Title V Operating Permit Program;
- Non-Attainment New Source Review (NANSR);
- National Emission Standards for Hazardous Air Pollutants (NESHAP);
- New Source Performance Standards (NSPS); and
- > West Virginia State Implementation Plan (SIP) Regulations.

Regulations potentially applicable to the proposed project are also detailed in Attachment D included as part of this application.

This review is presented to supplement and/or add clarification to the information provided in the WVDEP application forms, which fulfill the requirement to include citations and descriptions of applicable statutory and administrative code requirements.

In addition to providing a summary of applicable requirements, this section of the application also provides non-applicability determinations for certain regulations, thereby providing WVDEP a full regulatory applicability analysis for the proposed project. Note that explanations of non-applicability are limited to those regulations for which there may be some question of applicability specific to the proposed modifications at the Marshall County Preparation Plant.

2.1. FEDERAL REGULATORY APPLICABILITY

2.1.1. PSD Applicability

The applicability of PSD is evaluated for proposed construction, reconstruction, and modification projects that result in an emission increase of a regulated New Source Review (NSR) pollutant for which the area is in attainment with the National Ambient Air Quality Standards (NAAQS). As previously mentioned, the proposed modifications to the Marshall County Preparation Plant result in emissions increases of filterable PM (i.e., PM/PM₁₀/PM_{2.5}). Marshall County has been designated "in attainment" or "unclassifiable" for all regulated NSR pollutants involved in the proposed project.¹ Coal cleaning plants without thermal dryers are not classified as one of the 28 listed source categories in 45CSR14-2.43.a. Therefore, the Marshall County Preparation Plant is subject to a PSD major source threshold of 250 tons for each NSR-regulated pollutant as provided in 45CSR14-2.43.b.

The Marshall County Preparation Plant has potential emissions of less than 250 tpy of all NSR-regulated pollutants and is therefore considered an existing "minor" source for the purposes of PSD.² Accordingly, any modifications of the facility would not be subject to PSD unless the modification in and of itself resulted in an emissions increase of more than 250 tons of a NSR-regulated pollutant. As demonstrated in Table 1-

¹ Attainment designations for West Virginia counties are established in 40 CFR 81.349.

² Consistent with the provisions of 45CSR14-2.43.e-g, fugitive emissions from haul roads at the Marshall County Preparation Plant are not included when determining major source status under PSD.

1, the project-associated emissions increases for all NSR-regulated pollutants do not exceed the applicable threshold, and the Marshall County Preparation Plant is not subject to PSD review for the proposed project.

2.1.2. NANSR Applicability

The applicability of NANSR is evaluated for proposed construction, reconstruction, and modification projects that result in an emission increase of a regulated NSR pollutant for which the area is not attaining the NAAQS. Because Marshall County has been designated as "in attainment" or "unclassifiable" for all regulated NSR pollutants with emissions affected by the proposed project, NANSR does not apply to the proposed project.

2.1.3. Title V Operating Permit Program Applicability

Title 40 of the Code of Federal Regulations Part 70 (40 CFR 70) establishes the federal Title V operating permit program. West Virginia has incorporated the provisions of this federal program in its Title V operating permit program in 45CSR30. The major source thresholds with respect to the West Virginia Title V operating permit program regulations are 10 tons per year (tpy) of a single hazardous air pollutant (HAP), 25 tpy of any combination of HAP, and 100 tpy of all other regulated pollutants.

As demonstrated in Attachment N, facility-wide post-project potential emissions for all regulated pollutants, excluding fugitive emissions (e.g., haul roads), are below the corresponding Title V thresholds. Therefore, the Marshall County Preparation Plant will remain a minor source with respect to the Title V operating permit program.

2.2. NEW SOURCE PERFORMANCE STANDARDS (NSPS)

The federal NSPS require new, modified, or reconstructed sources to control emissions to the level that is achievable by the best system of emissions reduction as specified in the provisions of the applicable rule. This section provides applicability determinations for each of the NSPS to which the proposed modification at the Marshall County Preparation Plant is potentially subject.

In addition to the specific standards described below, MCCC must also comply with the general provisions of Title 40, Code of Federal Regulations, Part 60 (40 CFR 60), Subpart A, which establish notification, recordkeeping, testing, monitoring, and reporting requirements for any and all sources subject to a particular NSPS.

2.2.1. NSPS Subpart Y - Coal Preparation and Processing

Subpart Y applies to the affected facilities identified in 40 CFR 60.250 which are located at coal preparation plants that process more than 200 tons per day where construction, reconstruction, or modification occurred after October 27, 1974. A coal preparation and processing plant is any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying. Affected sources under NSPS Y include (but are not limited to) coal processing and conveying equipment (including breakers and crushers), coal storage systems, transfer and loading systems, and open storage piles. As specified in 40 CFR 60.251(d), for units constructed, reconstructed, or modified after May 27, 2009, coal is defined as

...all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 ...and coal refuse. The proposed modifications at the Marshall County Preparation Plant will include the installation of new affected facilities under NSPS Y. The three (3) conveyors being installed as part of the proposed project are considered "coal processing and conveying equipment" in accordance with the definition provided at 40 CFR 60.251(f). Furthermore, the truck bin is a "coal storage system" pursuant to the definition in 40 CFR 60.251(h). Pursuant to 40 CFR 60.254(b)(1), MCCC must not cause any gases which exhibit 10 percent opacity or greater to be discharged into the atmosphere from the conveyors and the truck bin.

2.3. NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP)

National Emission Standards for Hazardous Air Pollutants (NESHAPs), located in 40 CFR 63, are typically applicable to specific categories of sources that have the potential to emit HAP in levels greater than 10 tpy for any individual HAP or 25 tpy for any combination of HAP (i.e., major HAP sources). Emissions and operational limitations provided in the NESHAPs are established on the basis of a Maximum Achievable Control Technology (MACT) determination for a particular major source category.

Furthermore, generally available control technology (GACT)-based NESHAPs (located in 40 CFR 63) require area (i.e., non-major) sources to control emissions to the level achievable by the use of generally available control technologies or management practices to reduce emissions of HAP.

Because the Marshall County Preparation Plant emits total and individual HAP in quantities less than 25 and 10 tpy, respectively, the facility is considered an area (i.e., non-major) source of HAP. The Marshall County Preparation Plant is not subject to any NESHAP requirements applicable to specific source categories, and because the Marshall County Preparation Plant is an area source of HAP, MCCC is not required to conduct a case-by-case MACT determination under Section 112(g) and 45CSR 34 for facilities not regulated by a specific industrial source type.

2.4. WEST VIRGINIA SIP REGULATIONS

The Marshall County Preparation Plant is currently permitted under the regulations contained in West Virginia's Title 45 Legislative Rules (CSR) of the Department of Environmental Protection Office of Air Quality (WVDEP regulations). This section of the application highlights applicability of specific West Virginia State Implementation Plan (SIP) regulations that may apply to the proposed modification at the Marshall County Preparation Plant.

Title 45 is divided into various series, each covering a specific aspect of the state's air pollution regulatory program. The series that contain requirements that could be applicable to the proposed modification at the Marshall County Preparation Plant are discussed in the following paragraphs. West Virginia regulations that are generally applicable to the mine as a whole are not discussed in this application.

2.4.1.45CSR5

Series 5 *To Prevent and Control Particulate Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations, and Coal Refuse Disposal Areas* contains particulate regulations that apply to the proposed project. 45CSR5-3.4 establishes visible emissions limits of less than 20% opacity from fugitive sources. However, the new conveyors and truck bin will be subject to the more stringent NSPS Y opacity requirement.

45CSR5-6.1 requires that coal handling operations be equipped with a fugitive dust control system (as defined in 45CSR5-2.13). The new coal handling operations included as part of this proposed project will comply with 45CSR5-6.1.

Additionally, 45CSR5-6.2 requires that MCCC maintain dust control of the premises or controlled access roads by paving, watering, or other suitable measures. Additionally, good operating practices shall be observed in relation to stockpiling, car loading, breaking, screening and general maintenance to minimize dust generation and atmospheric entrainment. MCCC will continue to comply with 45CSR5-6.2.

2.4.2.45CSR6

45CSR6 *To Prevent and Control Air Pollution from Combustion of Refuse* prohibits the open burning of refuse. The Marshall County Preparation Plant is subject to 45CSR6 and maintains compliance with this provision by prohibiting the practice.

2.4.3.45CSR17

Series 17 *To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter* regulates PM emissions from processing operations. According to 45 CSR 5-6.3:

Fugitive emissions from coal preparation plants and handling operations which are subject to this rule [45 CSR 5] shall be exempt from the provisions of 45CSR17, provided that such sources shall not be exempt from the provisions of W. Va. Code §§22-5-1 et seq., including the provisions of W. Va. Code §§22-5-3 relating to statutory air pollution.

As such, the Marshall County Preparation Plant is exempt from the requirements of 45CSR17.

The permit application forms in the following Attachments are being submitted as required by WVDAQ for a permit to construct.

MCCC will contact WVDAQ to make payment arrangements for the application fees. The appropriate permit application fee is \$1,000 provided in 45CSR22-3.4.a plus the additional NSPS review fee of \$1,000 for the applicability of NSPS Y in accordance with 45CSR22-3.4.b.

GENERAL APPLICATION FORM

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF AIR QUALIT 601 57 th Street, SE Charleston, WV 25304 (304) 926-0475 Www.dep.wv.gov/dag	Ϋ́		TLE V PE	FOR NSR PERMIT AND RMIT REVISION TIONAL)
PLEASE CHECK ALL THAT APPLY TO NSR (45CSR13) (IF K	NOWN):	PLEASE CHECK	TYPE OF 450	CSR30 (TITLE V) REVISION (IF ANY):
CLASS I ADMINISTRATIVE UPDATE TEMPORARY				ED, INCLUDE TITLE V REVISION
		INFORMATION A	S ATTACHME	NT S TO THIS APPLICATION
FOR TITLE V FACILITIES ONLY: Please refer to "Title (Appendix A, "Title V Permit Revision Flowchart") and				
Sec	ction	I. General		
1. Name of applicant <i>(as registered with the WV Secreta</i> The Marshall County Coal Company	ary of St	tate's Office):	2. Federal 13-256659	Employer ID No. <i>(FEIN):</i>)4
3. Name of facility (if different from above):			4. The appli	cant is the:
The Marshall County Preparation Plant		OPERATOR BOTH		
5A. Applicant's mailing address:	5A. Applicant's mailing address: 5B. Facility's present physical address:			ddress:
		West Virginia		2,
St. Clairsville, OH 43950 Moundsville, WV 26041				
 6. West Virginia Business Registration. Is the applicant a resident of the State of West Virginia? ■ YES □ 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:				
8. Does the applicant own, lease, have an option to buy or otherwise have control of the proposed site? I YES INO				
If YES, please explain:				
The land occupied by the Marshall County Preparation Plant is owned by MCCC. ↓ 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.): Underground Coal Mine and associated Preparation Plant 10. North American Industry Classification System (NAICS) code for the facility: 				
11A. DAQ Plant ID No. (for existing facilities only):				CSR30 (Title V) permit numbers existing facilities only):
051-00020		-2177F	·	
All of the required forms and additional information can be	found u	nder the Permitting	g Section of D	AQ'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	present location of the facility from the nearest state road;		
➡ For Construction or Relocation permits, please p road. Include a MAP as Attachment B.	provide directions to the proposed new s	ite location from the nearest state	
I-70 East to 7 South. Take Moundsville 12	th St. exit. Turn right onto Rt.	2 South, Facility is	
located ~10 miles south adjacent to Rt. 2.			
12.B. New site address (if applicable):	12C. Nearest city or town:	12D. County:	
N/A	Moundsville	Marshall	
12.E. UTM Northing (KM): 4409252.53	12F. UTM Easting (KM): 515905.16	12G. UTM Zone: 17	
13. Briefly describe the proposed change(s) at the facilit	ty:		
MCCC plans to install equipment to transfer co	pal combustion product (CCP) to	the 2nd refuse disposal area.	
14A. Provide the date of anticipated installation or chan		14B. Date of anticipated Start-Up	
If this is an After-The-Fact permit application, prove change did happen: / / N/A		if a permit is granted: Upon permít isst/ance	
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). See attached.			
15. Provide maximum projected Operating Schedule of activity/activities outlined in this application:24Hours Per Day 7Days Per Week 52Weeks Per Year			
16. Is demolition or physical renovation at an existing fa	cility 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. ^{N/A}			
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. See attached.			
Section II. Additional att	achments and supporting d	ocuments.	
19. Include a check payable to WVDEP – Division of Air Quality with the appropriate application fee (per 45CSR22 and			
45CSR13). To be submitted.			
20. Include a Table of Contents as the first page of your application package. See attached.			
 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 structur			
22. Provide a Detailed Process Flow Diagram(s) showing each proposed or modified emissions unit, emission point and control device as Attachment F. See attached .			
23. Provide a Process Description as Attachment G. See attached.			
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.			
r> For chemical processes, provide a MS	SDS for each compound emitted	to the air. N/A	
25. Fill out the Emission Units Table and provide it as Attachment I. See attached.			
26. Fill out the Emission Points Data Su	Immary Sheet (Table 1 and Tab	ble 2) and provide it as Attachment J. See attached.	
27. Fill out the Fugitive Emissions Data	Summary Sheet and provide it	as Attachment K. See attached.	
28. Check all applicable Emissions Unit	Data Sheets listed below:		
Bulk Liquid Transfer Operations	Haul Road Emissions	Quarry	
Chemical Processes	Hot Mix Asphalt Plant	Solid Materials Sizing, Handling and Storage	
Concrete Batch Plant	Incinerator	Facilities	
Grey Iron and Steel Foundry	Indirect Heat Exchanger	Storage Tanks	
General Emission Unit, specify	Nonmetallic Minerals Proc	sessing	
Fill out and provide the Emissions Unit D	Data Sheet(s) as Attachment L.	See attached.	
29. Check all applicable Air Pollution Co	ontrol Device Sheets listed belo	w:	
Absorption Systems	Baghouse	☐ Flare	
Adsorption Systems	Condenser	Mechanical Collector	
Afterburner	Electrostatic Precipita	tor Uet Collecting System	
Other Collectors, specify			
		Englagura avatama watar truck	
Fill out and provide the Air Pollution Con	trol Device Sheet(s) as Attach	ment M. Enclosure systems, water truck	
30. Provide all Supporting Emissions Calculations as Attachment N , or attach the calculations directly to the forms listed in Items 28 through 31. See attached.			
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. See attached.			
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. See attached.			
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 " <i>Precautionary Notice – Claims of Confidentiality</i> " guidance found in the <i>General Instructions</i> as Attachment Q.			
Se	ction III. Certification of	of Information	
34. Authority/Delegation of Authority. Check applicable Authority Form be		her than the responsible official signs the application.	
Authority of Corporation or Other Busir	ness Entity	Authority of Partnership	
Authority of Governmental Agency		Authority of Limited Partnership	
Submit completed and signed Authority I			
		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		DATE: 323/17 (Please use blue ink) 35C. Title: Vice President
35D. E-mail: 36E. Phone: rmoore@coalsource.com (740) 338-3100		36F. FAX: (740) 338-3416
36A. Printed name of contact person (if different from above):		36B. Title:
James Earp		Permit Engineer
^{36C. E-mail:}	36D. Phone:	36E. FAX:
jamesearp@coalsource.com	(740) 338-3100	(740) 338-3416

PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED	WITH THIS PERMIT APPLICATION:
 Attachment A: Business Certificate Attachment B: Map(s) Attachment C: Installation and Start Up Schedule Attachment D: Regulatory Discussion Attachment E: Plot Plan Attachment F: Detailed Process Flow Diagram(s) Attachment G: Process Description Attachment H: Material Safety Data Sheets (MSDS) Attachment I: Emission Units Table Attachment J: Emission Points Data Summary Sheet 	 Attachment K: Fugitive Emissions Data Summary Sheet Attachment L: Emissions Unit Data Sheet(s) Attachment M: Air Pollution Control Device Sheet(s) Attachment N: Supporting Emissions Calculations Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans Attachment P: Public Notice Attachment Q: Business Confidential Claims Attachment R: Authority Forms Attachment S: Title V Permit Revision Information Application Fee
Disease mail an animinal and the (0) is a full	

Please mail an original and three (3) copies of the complete permit applic	ation with the signature(s) to the DA	2, Permitting Section, at the
address list	ed on the first page of this application	. Please DO NOT fax permit applicati	ons.

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: THE MARSHALL COUNTY COAL COMPANY 57 GOSHORN WOODS RD CAMERON, WV 26033-2305

BUSINESS REGISTRATION ACCOUNT NUMBER:

2291-2432

This certificate is issued on: 02/20/2014

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.

atL006 v.4 L1468855360

(a) A. W. Y. Stallog, A. M. W. Rei, M. S. M. Stallow, A. M. S. Stallow, A. S. Santa, Santa, Santa, Santa, Santa, Santa, S



Figure B-1. Marshall County Preparation Plant Aerial View of Surrounding Area

The Marshall County Preparation Plant was issued Permit to Construct R13-2177F on February 1, 2016. This modification application is submitted to update the R13 permit to authorize the installation of new equipment to transfer coal combustion product to the refuse disposal area #2. Construction activities associated with the proposed project will not commence until the revised R13 permit has been issued.

This section documents the applicability determinations made for federal and state air quality regulations. Federal and WVDEP state regulations that are potentially applicable to the Marshall County Preparation Plant are listed in Tables D-1 and D-2. Notes are provided for each applicability determination briefly summarizing why each regulation is considered applicable.

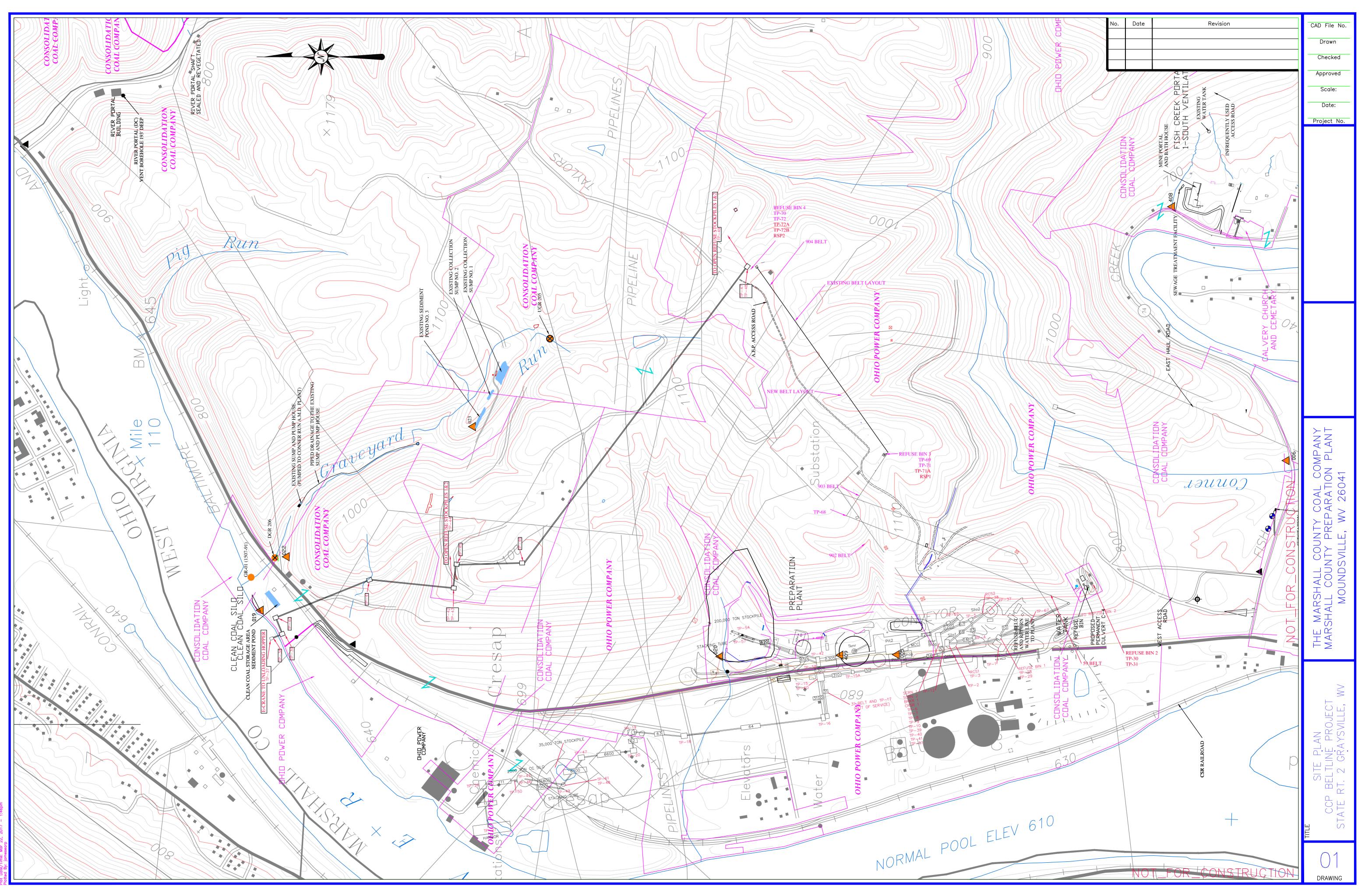
Regulation	Applicability
40 CFR 60, Subpart A – "General Provisions"	These general requirements are applicable to stationary sources that are subject to a source-specific NSPS that references 40 CFR 60, Subpart A. MCCC is required to comply with Subpart Y.
40 CFR 60, Subpart Y – "Standards of Performance for Coal Preparation and Processing Plants"	Because the new conveyors and the truck bin are affected facilities as defined in this subpart, the equipment involved in the proposed project is subject to the provisions in 40 CFR 60, Subpart Y. Pursuant to 40 CFR 60.254(b)(1), MCCC must not cause any gases which exhibit 10 percent opacity or greater to be discharged into the atmosphere from the conveyors or the truck bin.
40 CFR 70 – "State Operating Programs"	As detailed in Section 2.1.3 of the application, the Marshall County Preparation Plant will remain a minor source with respect to the Title V operating permit program after installation of the proposed equipment.

Table D-1. Federal Applicability

Rule	Applicability
45CSR5 – "To Prevent and Control Particulate Air Pollution from the Operation of Coal Preparation Plants, Coal Handling Operations, and Coal Refuse Disposal Areas"	MCCC is subject to the standards and provisions in 45CSR5. The new conveyors, the truck bin, and vehicular traffic will be subject to these provisions. MCCC will comply with this rule by employing good air pollution control practices to minimize visible emissions and by updating the fugitive dust control plan to reflect the proposed project.
45CSR6 – "To Prevent and Control Air Pollution from Combustion of Refuse"	The Marshall County Preparation Plant is subject to 45CSR6 and maintains compliance with this provision by prohibiting the practice.
45CSR13- "Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation"	Generally applicable. MCCC is required to apply for a permit to construct for the proposed project.
45CSR16 - "Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60"	The new conveyors and truck bin are subject to 40 CFR 60, Subpart Y for coal preparation and processing operations and, therefore, must comply with these requirements.
45CSR22 – "Air Quality Management Fee Program"	Generally applicable.
45CSR30 – "Requirements for Operating Permits"	As detailed in Section 2.1.3 of the application, the Marshall County Preparation Plant will remain a minor source with respect to the Title V operating permit program after installation of the proposed equipment.

Table D-2. State Rule Applicability

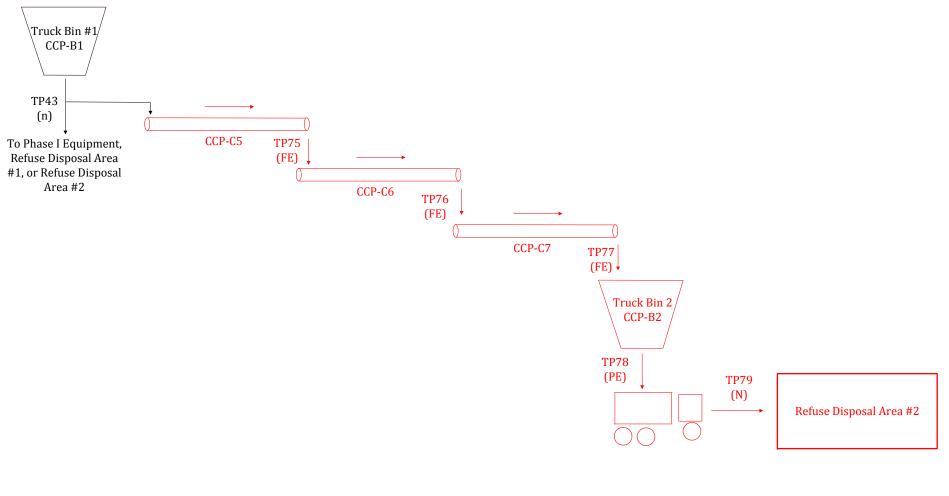
ATTACHMENT E: PLOT PLAN

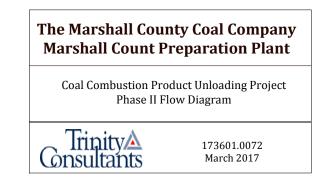


REF Files: IMAGE Files: 'e: C:\Users\jamesearp\Documents\Marshall County\Belt Line Air Permit\Phase 2\Plot Plan_

ATTACHMENT F: PROCESS FLOW DIAGRAM

Attachment F. Coal Combustion Product Unloading Project Phase II Process Flow Diagram





The Marshall County Preparation Plant is an active bituminous coal underground mine. The coal is procured from an existing mine portal and is conveyed to two raw coal storage silos. From the raw coal storage pile, coal is conveyed to a screening tower, where the raw coal is screened and separated into two distinct material streams: the refuse stream is crushed, conveyed to refuse storage bins, and ultimately transported to refuse storage piles, and the "plant feed" coal is conveyed to a silo and ultimately transported to the preparation plant. Two types of material exit the preparation plant. The first type of material is refuse. The refuse is conveyed to a refuse storage bin and ultimately transferred to the refuse storage piles. The second type of material is clean coal, which is raw coal that has been screened, sized, and washed in the preparation plant. Clean coal is conveyed to the clean coal storage bin and ultimately transferred to the barge loadout area.

With this application, MCCC is requesting authorization to construct Phase II of a project to allow the facility to receive, handle, and store coal combustion product (CCP) at the Marshall County Preparation Plant. Specifically, new equipment will be installed to allow the facility to convey CCP to the refuse disposal area #2. The new equipment will include three (3) conveyors and truck loading bin.

ATTACHMENT I: EMISSION 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
CCP-C5	TP74	Coal Combustion Product Conveyor 5	2017	1,600 tph	New	FE
CCP-C6	TP75	Coal Combustion Product Conveyor 6	2017	1,600 tph	New	FE
CCP-C7	TP76	Coal Combustion Product Conveyor 7	2017	1,600 tph	New	FE
CCP-B2	TP43	CCP Truck Bin #2	2017	300 ton	New	PE
VT-UP	N/A	Vehicular Traffic	2017 M	N/A	Modification	WT

Attachment J EMISSION POINTS DATA SUMMARY SHEET

Table 1: Emissions Data															
Emission Point ID No. (Must match Emission Units Table & Plot Plan)	Point ID No. Point (Must match Emission Units Table Point Vented Through This Point (Must match		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	Est. Method Used ⁶	Emission Concentration 7 (ppmv or mg/m ⁴)	
		ID No.	Source	ID No.	Device Type	Short Term ²	Max (hr/yr)		lb/hr	ton/yr	lb/hr	ton/yr	Gas/Vapor)		
		CCP-C5				N/A	N/A	РМ	0.068	0.075	0.014	0.015	Solid	EE	N/A
TP-75	Fugitive			FE	PM ₁₀			0.032	0.035	0.006	0.007	Solid	EE	N/A	
								PM _{2.5}	0.005	0.005	0.001	0.001	Solid	EE	N/A
	Fugitive	CCP-C6		FE			N/A	РМ	0.068	0.075	0.014	0.015	Solid	EE	N/A
TP-76						N/A		PM10	0.032	0.035	0.006	0.007	Solid	EE	N/A
								PM _{2.5}	0.005	0.005	0.001	0.001	Solid	EE	N/A
		CCP-C7		FE		N/A	N/A	РМ	0.068	0.075	0.014	0.015	Solid	EE	N/A
TP-77	Fugitive							PM ₁₀	0.032	0.035	0.006	0.007	Solid	EE	N/A
								PM _{2.5}	0.005	0.005	0.001	0.001	Solid	EE	N/A
	Fugitive	CCP-B2		PE		N/A	N/A	РМ	0.068	0.075	0.034	0.037	Solid	EE	N/A
TP-78	Tugitive							PM ₁₀	0.032	0.035	0.016	0.018	Solid	EE	N/A
								РМ	0.005	0.005	0.002	0.003	Solid	EE	N/A
		N/A		N		N/A	N/A	РМ	0.068	0.075	0.068	0.075	Solid	EE	N/A
TP-79	Fugitive							PM ₁₀	0.032	0.035	0.032	0.035	Solid	EE	N/A
								PM _{2.5}	0.005	0.005	0.005	0.005	Solid	EE	N/A
		ive VT-UP				N/A	N/A	РМ	726.11	794.19	217.83	238.26	Solid	EE	N/A
VT-UP	Fugitive			W	Τ			PM ₁₀	206.98	226.38	62.09	67.91	Solid	EE	N/A
								PM _{2.5}	20.70	22.64	6.21	6.79	Solid	EE	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.

¹ Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.

² 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).

³ 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, all applicable Greenhouse Gases (including CO₂ and methane), etc. **DO NOT LIST** H₂, H₂O, N₂, O₂, and Noble Gases.

⁴ 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).

⁵ 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).

⁶ 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).

⁷ 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 J **EMISSION POINTS DATA SUMMARY SHEET**

Table 2: Release Parameter Data										
Emission Point ID No. (Must match Emission Units Table)	Inner Diameter (ft.)	Exit Gas			Emission Point El	evation (ft)	UTM Coordinates (km)			
		Temp. (°F)	Volumetric Flow ¹ (acfm) <i>at operating conditions</i>	Velocity (fps)	Ground Level (Height above mean sea level)	Stack Height ² (Release height of emissions above ground level)	Northing	Easting		

¹Give at operating conditions. Include inerts. ²Release height of emissions above ground level.

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
	☐ If YES, complete Table 1 of the NONMETALLIC MINERALS PROCESSING EMISSIONS UNIT DATA SHEET.
3.)	Will there be Liquid Loading/Unloading Operations?
	□ Yes
	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
	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
	☐ 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
	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.
	ou answered "NO" to all of the items above, it is not necessary to complete the following table, "Fugitive Emissions mmary."

FUGITIVE EMISSIONS SUMMARY	All Regulated Pollutants ⁻ Chemical Name/CAS ¹	Maximum Uncontrolled		Maximum Potential Controlled Emissions ³		Est. Method
	Chemical Name/CAS	lb/hr	ton/yr	lb/hr	ton/yr	Used ⁴
Haul Road/Road Dust Emissions Paved Haul Roads	N/A	N/A	N/A	N/A	N/A	N/A
	PM	726.11	794.19	217.83	238.26	EE
Unpaved Haul Roads	PM10	206.98	226.38	62.09	67.91	EE
	PM _{2.5}	20.70	22.64	6.21	6.79	EE
Storage Pile Emissions	N/A	N/A	N/A	N/A	N/A	N/A
Loading/Unloading Operations	N/A	N/A	N/A	N/A	N/A	N/A
Wastewater Treatment Evaporation & Operations	N/A	N/A	N/A	N/A	N/A	N/A
Equipment Leaks	N/A	N/A	N/A	N/A	N/A	N/A
General Clean-up VOC Emissions	N/A	N/A	N/A	N/A	N/A	N/A
	PM	0.34	0.37	0.14	0.16	EE
Other	PM10	0.16	0.18	0.07	0.08	EE
	PM _{2.5}	0.02	0.03	0.01	0.01	EE

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, all applicable Greenhouse Gases (including CO₂ and methane), etc. DO NOT LIST 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 Emission Unit Data Sheet (NONMETALLIC MINERALS PROCESSING)

Control Device ID No. (must match List Form):

Equipment Information

1.	Plant Type:	facility that red	uces the size	ofn	onmetallic mineral	s embedded in	recycled asphalt			
	pavement	domity that road		01 11			reeyeled asphar			
	Plant without crush	ners or grinding	mills and conta	ining	g a stand-alone scr	eening operation				
	Sand and gravel p	lant [Common cla	y pla	ant					
	Crushed stone pla	nt [Pumice plant	t						
	Other, specify Co		Preparation I	Plan	nt					
2.		xed Plant ortable Plant	Diant Conceitry 4 400							
4.	Underground mine:	Yes	🗌 No	5.	Storage:	Open 🗌	Enclosed			
6.	Emission Facility Type	Equipment Type Used	ID Number of Emission Ur		Manufacturer	Model Number Serial Number				
	Conveyors	Conveyor Belt	CCP-C5 - CCP	-C7	Various	N/A	2017			
	Crusher	N/A	N/A		N/A	N/A	N/A			
	Secondary Crushers	N/A	N/A		N/A	N/A	N/A			
	Tertiary Crushers	N/A	N/A		N/A	N/A	N/A			
	Grinder	N/A	N/A		N/A	N/A	N/A			
	Hoppers	N/A	N/A		N/A	N/A	N/A			
	Rock Drills	N/A	N/A		N/A	N/A	N/A			
	Screens	N/A	N/A		N/A	N/A	N/A			
	Enclosed Storage	Bin	CCP-B2		N/A	N/A	2017			
	Other	N/A	N/A		N/A	N/A	N/A			
	Other	N/A	N/A		N/A	N/A	N/A			
	Other	N/A	N/A		N/A	N/A				
		Opera	tion Rate		Annual		Air Pollution			
	Emission Facility Type	Design	Design		Production	Number of Units	Control Device			
	1,900	Ton/hr	Ton/hr		Tons/year	onito	Used			
	Conveyors	1,600	1,600		3,500,000	3	N/A			
	Crusher	N/A	N/A		N/A	N/A	N/A			
	Secondary Crushers	N/A	N/A		N/A	N/A	N/A			
	Tertiary Crushers	N/A	N/A		N/A	N/A	N/A			
	Grinder	N/A	N/A		N/A	N/A	N/A			
	Hoppers	N/A	N/A		N/A	N/A	N/A			
	Rock Drills	N/A	N/A		N/A	N/A	N/A			
	Screens	N/A	N/A		N/A	N/A	N/A			
	Enclosed Storage	1,600	1,600		3,500,000	1	N/A			
Other N/A N/A N/A N/A							N/A			
	Other	N/A	N/A		N/A	N/A	N/A			
	Other	N/A	N/A		N/A	N/A	N/A			

7. Provide a diagram and/or schematic that shows the proposed process of the operation or plant. The diagram and/or schematic is to show all sources, components and facets of the operation or plant in an understandable line sequence of the operation. The diagram should include all the equipment involved in the operation; such as conveyors, transfer points, stockpiles, crushers, facilities, vents, screens, truck dump bins, truck, barge and railcar loading and unloading, etc. Appropriate sizing and specifications of equipment should be included in the diagram. The diagram shall logical follow the entire process load-in to load-out.

8.	Roads	Paved Miles of	Unpaved Miles	Watered		Other Control	
		Road	of Road	Miles	Frequency	Other Control (Specify) 15 mph speed limit	
	Plant Yard	N/A	0.5	0.5	N/A	15 mph speed limit	
	Access Roads	N/A	N/A	N/A	N/A	N/A	

9. Vehicle Type

	Mean Vehicle	Mean Vehicl To	-	Number	Distance Traveled per Round Trip		
Vehicle Type	Speed in mph	Empty	Full	of Wheels	Paved Feet or Miles	Unpaved Feet or Miles	
Raw Aggregate	N/A	N/A	N/A	N/A	N/A	N/A	
Loaders	N/A	N/A	N/A	N/A	N/A	N/A	
Product Trucks	N/A	N/A	N/A	N/A	N/A	N/A	
Other CCP Haul Truck	10	76	126	4	0	1	
Other	N/A	N/A	N/A	N/A	N/A	N/A	
Other	N/A	N/A	N/A	N/A	N/A	N/A	
Other	N/A	N/A	N/A	N/A	N/A	N/A	

10. Describe all proposed materials storage facilities associated with the ${\sf Emission}$ Units listed. $N\!/\!A$

	Storage Activity								
ID of Emission Unit	N/A								
Type Storage									
Material Stored									
Typical Moisture Content (%)									
Avg % of material passing through 200 mesh sieve									
Maximum Total Yearly Throughput in storage (tons)									
Maximum Stockpile Base Area (ft ²)									
Maximum Stockpile height (ft)									
Dust control method applied to storage									
Method of material load-in to bin or stockpile									
Dust control method applied during load-in									
Method of material load- out to bin or stockpile									
Dust control method applied during load-out									
Estimate	d Turnover F	Rate Wetted	Number of	Other Dust	oading Method				

Storagepiles	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"						
Fine: 1" to ¼"						
¼" and less						
MFG. Sand						
Other, specify						
Raw Coal: 12" x 0						

Conveying and Transfer

Describe the conveying system including transfer points associated with proposed Emission Units (crushers, etc...).

Refer to the attached application narrative, process flow diagram (Attachment F), and process description (Attachment G).

Describe any methods of emission control to be used with these proposed conveying systems:

Full and partial enclosures will be utilized for some transfers as shown in Attachment F. Transfer drop heights will be minimized when possible.

ID of Emission	Type Conveyor or	Material Handled [Note	Material or Tran	Conveying sfer Rate	Dust Control Measures	Approximate Material
Unit	Transfer Point	nominal size of material transferred (e.g. ¾" × 0)]	Max. TPH	Maximum TPY	Applied	Moisture Content (%)
CCP-C5	Conveyor	Coal Combustion Product	1,600	3,500,000	FE	43
CCP-C6	Conveyor	Coal Combustion Product	1,600	3,500,000	FE	43
CCP-C7	Conveyor	Coal Combustion Product	1,600	3,500,000	FE	43
CCP-B2	Truck Bin	Coal Combustion Product	1,600	3,500,000	PE	43

Crushing and Screening

	1	or doning d				
ID of Emission Unit	N / A					
Type Crusher or Screen						
Material Sized						
Material Sized Throughp	ut:					
Tons/hr						
Tons/yr						
Material sized from/to						
Typical moisture content as crushed or screened (%)						
Dust control methods applied						
Stack Parameters:			I	I	L	
Height (ft)						
Diameter (ft)						
Volume (ACFM)						
Temp (°F)						
Maximum operating sch	edule:		I	I	1	
Hour/day						
Day/year						
Hour/year						
Approximate Percentage	of Operation	from:				
Jan – Mar						
April – June						
July – Sept						
Oct – Dec						
Maximum Particulate Em	nissions:		Γ	Ι	Γ	
LB/HR						
Ton/Year						

List emission sources with request information:

ID of Emission Unit	Type of Emission Unit and Use	Operating Actual (hrs/yr)	Schedule Design (hrs/yr)	Max. Amount of Stone Input to Emission (lb/hr)	Crushed or Screened From/To (size)	Date of Emission Unit was Manufacture
N/A				(,)	(0.20)	

List emission sources with request information:

ID of Emission	Maximum expected emissions from Emission Unit without Air Pollution Control Equipment									
Unit	PM₁₀ (lbs/hr)	SO 2 (lbs/hr)	CO (lbs/hr)	NO _x (lbs/hr)	VOC (lbs/hr)					
N/A										

ID of Emission	Maximum expec	cted emissions from	Emission Unit with	out Air Pollution Co	ontrol Equipment
Unit	PM₁₀ (tons/yr)	SO 2 (tons/yr)	CO (tons/yr)	NO _x (tons/yr)	VOC (tons/yr)
N/A					

Please fill out a separate Air Pollution Control Device Sheet for each Emission Unit equipped with an air pollution control system.

What type of stone will be quarried at this site?

N/A

How will it be quarried?

Sawing

Blasting

Other, Specify:

If blasting is checked, complete the following:

Frequency of blasting:

What method of air pollution control will be employed during drilling and blasting?

Attachment L FUGITIVE EMISSIONS FROM UNPAVED HAULROADS

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

•••••				PM			PM-10		
k =	Particle size multiplier				0.80			0.36	
S =	Silt content of road surface ma	aterial (%)				8.4		8.4	
p =	Number of days per year with precipitation >0.01 in.					157		157	
ltem Numbe	Description	Number of Wheels	Mean Vehicle Weight (tons)	Mean Vehicle Speed (mph)	Miles per Trip	Maximum Trips per Hour	Maximun Trips pe Year		Control Efficiency (%)
1	Coal Combustion Product to Refuse Area #2	4	101	10	1.08	32	140,000)	70
2									
3									
4									
5									
6									
7									
8									

Source: AP-42 Fifth Edition - 13.2.2 Unpaved Roads

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

		PM	PM-10
k =	Particle size multiplier	0.80	0.36
s =	Silt content of road surface material (%)	8.4	8.4
S =	Mean vehicle speed (mph)	10	10
W =	Mean vehicle weight (tons)	101	101
w =	Mean number of wheels per vehicle	4	4
p =	Number of days per year with precipitation >0.01 in.	157	157

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

For TPY: [Ib ÷ VMT] × [VMT ÷ trip] × [Trips ÷ Hour] × [Ton ÷ 2000 lb] = Tons/year

SUMMARY OF UNPAVED HAULROAD EMISSIONS	5

	PM					PM-10			
Item No.	Uncontrolled		Controlled		Uncontrolled		Controlled		
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	
1	726.11	794.19	217.83	238.26	206.98	226.38	62.09	67.91	
2									
3									
4									
5									
6									
7									
8									
TOTALS									

FUGITIVE EMISSIONS FROM PAVED HAULROADS

l =	Industrial augmentation factor	(dimensionle				
n =	Number of traffic lanes					
S =	Surface material silt content (%	%)				
L =	Surface dust loading (lb/mile)					
ltem Number	Description	Maximum Trips per Hour	Maximum Trips per Year	Control Device ID Number	Control Efficiency (%)	

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

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

$$E = 0.077 \times I \times (4 \div n) \times (s \div 10) \times (L \div 1000) \times (W \div 3)^{0.7} =$$

Ib/Vehicle Mile Traveled (VMT)

Where:

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

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

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

SUMMARY OF PAVED HAULROAD EMISSIONS

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

Attachment M Air Pollution Control Device Sheet (OTHER COLLECTORS)

Control Device ID No. (must match Emission Units Table): WT

Equipment Information

1.	Manufacturer: Model No. N/A	 Control Device Nat Type: Water Truck 						
3.	Provide diagram(s) of unit describing capture system with duct arrangement and size of duct, air volume, capacity, horsepower of movers. If applicable, state hood face velocity and hood collection efficiency. N / A							
4.	On a separate sheet(s) supply all data and calc N/A	culations used in selecting or	designing this collection device.					
5.	Provide a scale diagram of the control device sh	nowing internal construction.	V/A					
6.	Submit a schematic and diagram with dimension	ns and flow rates. N/A						
7.	Guaranteed minimum collection efficiency for ea	ach pollutant collected: N/A						
8.	Attached efficiency curve and/or other efficiency information. <i>Estimated PM10 Control Efficiency: 70% in accordance with Table A of WV DEP's "Application Instructions and Forms for General Permit G40-C for the Prevention and Control of Air Pollution in regard to the Construction, Modification, Relocation, Administrative Update and Operation of Nonmetallic Mineral Processing Plants"</i>							
9.	Design inlet volume: N/A SC	CFM 10. Capacity: N/A						
11.	Indicate the liquid flow rate and describe equipm	nent provided to measure pre	ssure drop and flow rate, if any.					
N//		aquipment and operation do	taile to therewebly evolute the					
12.	. Attach any additional data including auxiliary of control equipment. N/A	equipment and operation de	tails to thoroughly evaluate the					
13.	Description of method of handling the collected	material(s) for reuse of dispos	sal.					
N/.	4							
	Gas Strea	am Characteristics						
14.	Are halogenated organics present? N/A Are particulates present? N/A Are metals present? N/A	☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No						
15	Inlet Emission stream parameters:	Maximum	Typical					
1	Pressure (mmHg):	N/A	N/A					
	Heat Content (BTU/scf):	N/A	N/A					
	Oxygen Content (%):	N/A	N/A					

Moisture Content (%):				N/A			N/A		
Relative Humidity (%):				N/A			N/A		
16.	Type of pollutant(s) o		SO _x		Odor Other				
17.	Inlet gas velocity:		N/A	ft/sec	18. Pollutant	specific gr	avity:	N/A	
19.	Gas flow into the col N/A ACF @	lector: <i>N/A</i> °F and	N/A	PSIA	20. Gas strea	Inle		N/A N/A	°F °F
21.	Gas flow rate: Design Maximum: Average Expected:	N/A N/A		ACFM ACFM	22. Particulat	Inle	bading et: N/A tlet: N		
23.	Emission rate of eac	h pollutant (spe	ecify) into	and out	of collector:				
	Pollutant	IN P Ib/hr	ollutant grai	ins/acf	Emission Capture Efficiency %	O Ib/hi		ollutant grains/acf	Control Efficiency %
	A PM10	Varies			N/A	Varie	s		70
	B								
	C D								
	E								
24	Dimensions of stack	: // /AHe	iaht	N/A	ft. N/A	Diar	neter	N/A f	<u> </u>
	Supply a curve show rating of collector. N	wing proposed	-						
	······g ·· ·····		Part	ticulate	Distribution				
	Complete the table: articulate Size Range	e (microns)		to C	stribution at lı Collector or Size Range	nlet Fr		n Efficiency of ght % for Size	
	0-2		TTCI;	-	//A		molę	N/A	lange
	2 – 4			٨	I/A		N/A		
	4 - 6		N/A				N/A		
	6 – 8		N/A				N/A		
	8 – 10			٨	I/A			N/A	
10 – 12			٨	I/A			N/A		
12 – 16					I/A			N/A	
16 – 20					I/A			N/A	
20 - 30					I/A			N/A	
<u> </u>					I/A			N/A	
	40 - 50				I/A I/A			N/A N/A	
	60 - 70				//A	 		N/A N/A	
╞	70 - 80				//A		N/A		

80 - 90		N	/A	N/A		
90 – 100)	N	/A	N/A		
>100		N	/A	N/A		
27. Describe any air p reheating, gas hum		device inlet and o	utlet gas condition	ing processes (e.g., gas cooling, gas		
28. Describe the collec	tion material dis	posal system: N/A				
29. Have you included	Other Collector	res Control Devic	e in the Emissions	Points Data Summary Sheet? Yes		
	nonitoring, recor g parameters.	dkeeping, and re	eporting in order t	o demonstrate compliance with the o demonstrate compliance with the		
MONITORING: Control efficiency values came from Table A of WV DEP's "Application Instructions and Forms for General Permit G40-C for the Prevention and Control of Air Pollution in regard to the Construction, Modification, Relocation, Administrative Update and Operation of Nonmetallic Mineral Processing Plants."RECORDKEEPING: Control efficiency values came from Table 						
REPORTING: Control of of WV DEP's "Applic General Permit G40-C for Pollution in regard to Relocation, Administra Nonmetallic Mineral Pro	ation Instruction or the Prevention o the Constructi ttive Update an	s and Forms for and Control of Air on, Modification,	WV DEP's "App General Permit G4 Air Pollution in re Relocation, Admin	l efficiency values came from Table A of lication Instructions and Forms for 10-C for the Prevention and Control of gard to the Construction, Modification, nistrative Update and Operation of al Processing Plants."		
MONITORING:Please list and describe the process parameters and ranges that are proposed to be monitored in order to demonstrate compliance with the operation of this process equipment or air control device.RECORDKEEPING:Please describe the proposed recordkeeping that will accompany the monitoring. Please describe any proposed emissions testing for this process equipment on ai pollution control device.TESTING:Please describe any proposed emissions testing for this process equipment on ai pollution control device.						
31. Manufacturer's Gu	aranteed Control	l Efficiency for eac	h air pollutant. N/A			
32. Manufacturer's Gu	aranteed Control	Efficiency for eac	h air pollutant. N/A			

33. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty. $\it N/A$

Attachment M Air Pollution Control Device Sheet (OTHER COLLECTORS)

Control Device ID No. (must match Emission Units Table): PE

Equipment Information

1.	Manufacturer: Model No. N/A		 Control Device Nam Type: <i>Partial Enclo</i> 	-				
3.	Provide diagram(s) of unit describing capture system with duct arrangement and size of duct, air volume, capacity, horsepower of movers. If applicable, state hood face velocity and hood collection efficiency. N / A							
4.	On a separate sheet(s) supply all data and c <i>N/A</i>	alculation	s used in selecting or d	esigning this collection device.				
5.	Provide a scale diagram of the control device	showing	internal construction. N	/Α				
6.	Submit a schematic and diagram with dimens	sions and	flow rates. N/A					
7.	Guaranteed minimum collection efficiency for	r each poll	lutant collected: N/A					
8.	Attached efficiency curve and/or other efficiency information. Estimated PM10 Control Efficiency: 50% in accordance with Table A of WV DEP's "Application Instructions and Forms for General Permit G40-C for the Prevention and Control of Air Pollution in regard to the Construction, Modification, Relocation, Administrative Update and Operation of Nonmetallic Mineral Processing Plants"							
9.	Design inlet volume: N/A	SCFM 1	0. Capacity: N/A					
11.	Indicate the liquid flow rate and describe equi	ipment pro	ovided to measure press	sure drop and flow rate, if any.				
N/ ,	A Attach any additional data including auxiliar	ry equipm	ent and operation deta	ails to thoroughly evaluate the				
	control equipment. N/A	<i>y</i>	·	3 ,				
13.	Description of method of handling the collected	ed materia	al(s) for reuse of dispose	al.				
N//	4							
	Gas St	ream Cha	aracteristics					
14.	Are halogenated organics present?N/AAre particulates present?N/AAre metals present?N/A] Yes ☐ No] Yes ☐ No] Yes ☐ No					
15.	Inlet Emission stream parameters:		Maximum	Typical				
1	Pressure (mmHg):		N/A	N/A				
1	Heat Content (BTU/scf):		N/A	N/A				
	Oxygen Content (%):		N/A	N/A				

Moisture Content (%):				N/A			N/A		
Relative Humidity (%):				N/A			N/A		
16.	Type of pollutant(s) o		SO _x		Odor Other		1		
17.	Inlet gas velocity:		N/A	ft/sec	18. Pollutant	specific gr	avity:	N/A	
19.	Gas flow into the col N/A ACF @	lector: <i>N</i> /A°F and	N/A	PSIA	20. Gas strea	am tempera Inle Out	et:	N/A N/A	°F °F
21.	Gas flow rate: Design Maximum: Average Expected:	N/A N/A		ACFM ACFM	22. Particulat	Inle	bading et: N/A tlet: N		
23.	Emission rate of eac	h pollutant (spe	ecify) into	and out	of collector:				
	Pollutant	IN P Ib/hr	ollutant grai	ins/acf	Emission Capture Efficiency %	Ol Ib/hr		ollutant grains/acf	Control Efficiency %
	A PM10	Varies			N/A	Varie	S		50
	B								
	C D								
	E								
24	Dimensions of stack	: N/A H	eight	N/A	ft	Diamete	r	N/A ft.	
	Supply a curve show rating of collector. N	wing proposed	-						nt of design
	5		Part	ticulate	Distribution				
	Complete the table: articulate Size Range	e (microns)		to C	stribution at li Collector or Size Range	nlet Fra		n Efficiency of ght % for Size	
	0-2	. ,	N/A				N/A		
	2 – 4			٨	I/A			N/A	
	4 – 6			٨	I/A			N/A	
	6 – 8				I/A			N/A	
	8 – 10				I/A			N/A	
	10 - 12				I/A			N/A	
12 – 16 16 – 20					I/A			N/A	
20 - 30					I/A I/A			N/A N/A	
30 - 40					//A			N/A N/A	
40 - 50					//A			N/A N/A	
	50 - 60				//A			N/A	
	60 - 70				I/A			N/A	
70 - 80			N/A				N/A		

80 - 90		N	/A	N/A		
90 – 100)	N	/A	N/A		
>100		N	/A	N/A		
27. Describe any air p reheating, gas hum		device inlet and o	utlet gas condition	ing processes (e.g., gas cooling, gas		
28. Describe the collec	tion material dis	posal system: N/A				
29. Have you included	Other Collector	res Control Devic	e in the Emissions	Points Data Summary Sheet? Yes		
	nonitoring, recor g parameters.	dkeeping, and re	eporting in order t	o demonstrate compliance with the o demonstrate compliance with the		
MONITORING: Control efficiency values came from Table A of WV DEP's "Application Instructions and Forms for General Permit G40-C for the Prevention and Control of Air Pollution in regard to the Construction, Modification, Relocation, Administrative Update and Operation of Nonmetallic Mineral Processing Plants."RECORDKEEPING: Control efficiency values came from Table 						
REPORTING: Control of of WV DEP's "Applic General Permit G40-C for Pollution in regard to Relocation, Administra Nonmetallic Mineral Pro	ation Instruction or the Prevention o the Constructi ttive Update an	s and Forms for and Control of Air on, Modification,	WV DEP's "App General Permit G4 Air Pollution in re Relocation, Admin	l efficiency values came from Table A of lication Instructions and Forms for 10-C for the Prevention and Control of gard to the Construction, Modification, nistrative Update and Operation of al Processing Plants."		
MONITORING:Please list and describe the process parameters and ranges that are proposed to be monitored in order to demonstrate compliance with the operation of this process equipment or air control device.RECORDKEEPING:Please describe the proposed recordkeeping that will accompany the monitoring. Please describe any proposed emissions testing for this process equipment on ai pollution control device.TESTING:Please describe any proposed emissions testing for this process equipment on ai pollution control device.						
31. Manufacturer's Gu	aranteed Control	l Efficiency for eac	h air pollutant. N/A			
32. Manufacturer's Gu	aranteed Control	Efficiency for eac	h air pollutant. N/A			

33. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty. $\it N/A$

Attachment M Air Pollution Control Device Sheet (OTHER COLLECTORS)

Control Device ID No. (must match Emission Units Table): FE

Equipment Information

1.	Manufacturer: Model No. N/A		 Control Device Nam Type: <i>Full Enclosu</i> 					
3.	Provide diagram(s) of unit describing capture system with duct arrangement and size of duct, air volume, capacity, horsepower of movers. If applicable, state hood face velocity and hood collection efficiency. N / A							
4.	On a separate sheet(s) supply all data and N/A	l calculatio	ons used in selecting or c	lesigning this collection device.				
5.	Provide a scale diagram of the control devi	ce showing	g internal construction. N	/A				
6.	Submit a schematic and diagram with dime	nsions and	d flow rates. N/A					
7.	Guaranteed minimum collection efficiency f	or each po	ollutant collected: N/A					
8.	Attached efficiency curve and/or other efficiency information. Estimated PM10 Control Efficiency: 80% in accordance with Table A of WV DEP's "Application Instructions and Forms for General Permit G40-C for the Prevention and Control of Air Pollution in regard to the Construction, Modification, Relocation, Administrative Update and Operation of Nonmetallic Mineral Processing Plants"							
9.	Design inlet volume: N/A	SCFM	10. Capacity: //A					
11.	Indicate the liquid flow rate and describe ed	quipment p	provided to measure pres	sure drop and flow rate, if any.				
N/ ,	Attach any additional data including auxil	iary equip	ment and operation deta	ails to thoroughly evaluate the				
	control equipment. N/A							
13.	Description of method of handling the colle	cted mate	rial(s) for reuse of dispos	al.				
N//	4							
	Gas	Stream Cl	naracteristics					
14.	Are halogenated organics present?N/AAre particulates present?N/AAre metals present?N/A	Ά	☐ Yes ☐ No ☐ Yes ☐ No ☐ Yes ☐ No					
15	Inlet Emission stream parameters:		Maximum	Typical				
	Pressure (mmHg):		N/A	N/A				
	Heat Content (BTU/scf):		N/A	N/A				
Oxygen Content (%):			N/A	N/A				

Moisture Content (%):				N/A			N/A		
Relative Humidity (%):					N/A		N/A		
16. Type of pollutant(s) controlled: □ SO _x □ Particulate (type): Filterable					Odor Other		1		
17.	Inlet gas velocity:		N/A	ft/sec	18. Pollutant	specific gr	avity:	N/A	
19.	Gas flow into the col N/A ACF @	lector: <i>N</i> /A°F and	N/A	PSIA	20. Gas strea	am tempera Inle Out	et:	N/A N/A	°F °F
21.	Gas flow rate: Design Maximum: Average Expected:	N/A N/A		ACFM ACFM	22. Particulat	Inle	bading et: N/A tlet: N		
23.	Emission rate of eac	h pollutant (spe	ecify) into	and out	of collector:				
	Pollutant IN F Ib/hr		ollutant grai	ins/acf	Emission Capture Efficiency %	Ol Ib/hr		ollutant grains/acf	Control Efficiency %
	A PM10	Varies			N/A	Varie	S		50
	B								
	C D								
	E								
24	Dimensions of stack	: N/A H	eight	N/A	ft	Diamete	r	N/A ft.	
	Supply a curve show rating of collector. N	wing proposed	-						nt of design
	5		Part	ticulate	Distribution				
	Complete the table: articulate Size Range	e (microns)		to C	stribution at li Collector or Size Range	nlet Fra		n Efficiency of ght % for Size	
	0-2	. ,	N/A				N/A		
	2 – 4		N/A				N/A		
	4 – 6		N/A				N/A		
6 - 8			N/A				N/A		
	8 – 10				I/A			N/A	
10 - 12					I/A			N/A	
12 - 16					I/A			N/A	
16 – 20 20 – 30					I/A I/A			N/A N/A	
30 - 40					//A			N/A N/A	
40 - 50					//A			N/A N/A	
	50 - 60				//A			N/A	
	60 - 70				I/A			N/A	
	70 - 80		N/A N/A				N/A		

80 - 90		N	/A	N/A			
90 – 100)	N	/A	N/A			
>100		/A	N/A				
27. Describe any air p reheating, gas hum		device inlet and o	utlet gas condition	ing processes (e.g., gas cooling, gas			
28. Describe the collec	tion material dis	posal system: N/A					
29. Have you included	Other Collector	res Control Devic	e in the Emissions	Points Data Summary Sheet? Yes			
	nonitoring, recor g parameters.	dkeeping, and re	eporting in order t	o demonstrate compliance with the o demonstrate compliance with the			
MONITORING: Control A of WV DEP's "Applica General Permit G40-C for Pollution in regard to the Relocation, Administrati Nonmetallic Mineral Pro	ation Instructions or the Prevention e Construction, M ve Update and Op	and Forms for and Control of Air odification,	Table A of WVForms for GeneralControl of Air PoModification, Rel	G: Control efficiency values came from DEP's "Application Instructions and Permit G40-C for the Prevention and Ilution in regard to the Construction, ocation, Administrative Update and tetallic Mineral Processing Plants."			
REPORTING: Control of of WV DEP's "Applic General Permit G40-C for Pollution in regard to Relocation, Administra Nonmetallic Mineral Pro	ation Instruction or the Prevention o the Constructi ttive Update an	s and Forms for and Control of Air on, Modification,	WV DEP's "App General Permit G4 Air Pollution in re Relocation, Admin	l efficiency values came from Table A of lication Instructions and Forms for 10-C for the Prevention and Control of gard to the Construction, Modification, nistrative Update and Operation of al Processing Plants."			
MONITORING: Please list and describe the process parameters and ranges that are proposed to be monitored in order to demonstrate compliance with the operation of this process equipment or air control device. RECORDKEEPING: Please describe the proposed recordkeeping that will accompany the monitoring. REPORTING: Please describe any proposed emissions testing for this process equipment on air pollution control device. TESTING: Please describe any proposed emissions testing for this process equipment on air pollution control device.							
31. Manufacturer's Gu	aranteed Control	l Efficiency for eac	h air pollutant. N/A				
32. Manufacturer's Gu	aranteed Control	Efficiency for eac	h air pollutant. N/A				

33. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty. $\it N/A$

ATTACHMENT N: SUPPORTING EMISSIONS CALCULATIONS

Table N-1. Project Potential Emissions Summary

PRE-PROJECT POTENTIAL EMISSIONS

	Potential Emissions (tpy)							
	PM Filterable	PM ₁₀ Filterable	PM _{2.5} Filterable					
Emission Source Description	(tpy)	(tpy)	(tpy)					
Transfers	92.98	43.98	6.66					
Crushers/Screening	9.38	4.69	4.69					
Plant Exhaust Fans	19.10	9.55	9.55					
Roads	393.90	112.28	11.23					
Piles	12.35	6.18	6.18					
TOTAL	527.71	176.67	38.30					
TOTAL (without roadways)	133.82	64.39	27.08					

PROJECT EMISSIONS INCREASES

	Potential Emissions (tpy)							
	PM Filterable	PM ₁₀ Filterable	PM _{2.5} Filterable					
Emission Source Description	(tpy)	(tpy)	(tpy)					
Transfers	0.16	0.07	0.01					
Crushers/Screening								
Plant Exhaust Fans								
Roads	238.26	67.91	6.79					
Piles								
TOTAL	238.41	67.99	6.80					

POST PROJECT POTENTIAL EMISSIONS

	Potential Emissions (tpy)							
	PM Filterable	PM ₁₀ Filterable	PM _{2.5} Filterable					
Emission Source Description	(tpy)	(tpy)	(tpy)					
Transfers	93.14	44.05	6.67					
Crushers/Screening	9.38	4.69	4.69					
Plant Exhaust Fans	19.10	9.55	9.55					
Roads	632.15	180.19	18.02					
Piles	12.35	6.18	6.18					
TOTAL	766.13	244.66	45.11					
TOTAL (without roadways)	133.97	64.47	27.09					

Table N-2. New Transfer Points

EMISSIONS CALCULATIONS

	PM Potential							ıl to Emit		
				Emission	Contr.	Moist.		PM		PM
Flow Diagram		Transf	er Capacity	Factor ^a	Effic. ^b	Content	(11	o/hr)	(tpy)
ID	Emission Source Description	(tph)	(tpy)	(lb/ton)	(%)	(%)	Controlled	Uncontrolled	Controlled	Uncontrolled
TP75	CCP conveyor 5 to CCP conveyor 6	1,600	3,500,000	4.27E-05	80	43.0	0.014	0.068	0.015	0.075
TP76	CCP conveyor 6 to CCP conveyor 7	1,600	3,500,000	4.27E-05	80	43.0	0.014	0.068	0.015	0.075
TP77	CCP conveyor 7 to Truck Bin 2 (CCP-B2)	1,600	3,500,000	4.27E-05	80	43.0	0.014	0.068	0.015	0.075
TP78	Truck Bin 2 (CCP-B2) to truck	1,600	3,500,000	4.27E-05	50	43.0	0.034	0.068	0.037	0.075
TP79	Trucks to refuse disposal area 2	1,600	3,500,000	4.27E-05	0	43.0	0.068	0.068	0.075	0.075
				1	FOTAL PM		0.14	0.34	0.16	0.37
	TOTAL PM ₁₀ ^c 0.07 0.16						0.07	0.18		
	TOTAL PM _{2.5} ^d 0.01 0.02					0.02	0.01	0.03		

EMISSION FACTORS AND ASSUMPTIONS

a. Transfer Points (batch and continuous drop operation)

AP42, Section 13.2.4.3, Aggregate Handling and Storage Piles

Particulate (lb/ton) = $k^{(0.0032)}(U/5)^{1.3}/(M/2)^{1.4}$

where: k = particle size multiplier (0.74 for TSP; 0.35 for PM10; 0.053 for PM2.5)
U = mean wind speed (@ 6.2 mph for all sources)
M = material moisture content (%)

b. Control efficiency for full and partial enclosures taken from Table A of the application instructions for G10-D available from WVDEP.

c. Total PM_{10} Emissions = Total PM Emissions * (k_{PM10}/k_{PM})

d. Total $PM_{2.5}$ Emissions = Total PM Emissions * ($k_{PM2.5}/k_{PM}$)

Table N-3. New Haulroad Traffic

 $E = k (s/12)^{a} (W/3)^{b} (365-P)/365$

AP-42 Section 13.2.2, Equation 2 (November 2006)

DIMENSIONAL ANALYSIS

Mass Conversion	2,000 lb/ton	NIST SP1038
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POTENTIAL VEHICLE PARAMETERS

Path	Roadway Length - Round Trip (miles/vehicle) ^a	Vehicle Traffic (trips/hr)	Vehicle Traffic (trips/year)	Mean Vehicle Wt. & Capacity (tons)	Vehicle Capacity (tons)	Potential Throughput (tons)
CCP to Disposal Area	1.08	32	70,000	126	50	3,500,000
return trip	1.08	32	70,000	76	30	3,300,000

a The application for Phase I assumed all 3.5 million tons of CCP would be trucked 0.5 miles one way from CCP-B1 to refuse disposal area #1. The worst-case assumption for Phase II is that 3.5 million tons will be hauled from CCP-B1 to refuse disposal area #2 (bypassing the Phase II conveying equipment), which is 1.58 miles one way. Therefore, the increase in haulroad traffic associated with this application is 1.58 - 0.50 = 1.08 miles one way.

OPERATING PARAMETERS

Potential VMT - CCP to Disposal Area	34.6	miles/hr	= Roadway Length (miles/vehicle) * Vehicle Traffic (trips/hr)
Potential VMT - Return Trip	34.6	miles/hr	= Roadway Length (miles/vehicle) * Vehicle Traffic (trips/hr)
Potential VMT - CCP to Disposal Area	75,600	miles/year	= Roadway Length (miles/vehicle) * Vehicle Traffic (trips/year)
Potential VMT - Return Trip	75,600	miles/year	= Roadway Length (miles/vehicle) * Vehicle Traffic (trips/year)
Silt Loading	8.4	%	AP-42 Section 13.2.2, Table 13.2.2-1 for western surface coal mining haul roads (11/06)
Number of Days w/ at least 0.01" of Precipitation (P)	157	days	Table B of the G10-D application instructions
Control Efficiency	70%		Table A of the G10-D application instructions for use of a water truck on unpaved surfaces.

EMISSION FACTORS

Pollutant			
Particle Size Multiplier - PM (k)	4.9	lb/VMT	AP-42 Section 13.2.2, Table 13.2.2-2 (11/06)
Particle Size Multiplier - PM10 (k)	1.5	lb/VMT	AP-42 Section 13.2.2, Table 13.2.2-2 (11/06)
Particle Size Multiplier - PM2.5 (k)	0.15	lb/VMT	AP-42 Section 13.2.2, Table 13.2.2-2 (11/06)
Empirical Constant - PM, a	0.7		AP-42 Section 13.2.2, Table 13.2.2-2 (11/06)
Empirical Constant - PM ₁₀ /PM _{2.5} , a	0.9		AP-42 Section 13.2.2, Table 13.2.2-2 (11/06)
Empirical Constant - PM/PM ₁₀ /PM _{2.5} , b	0.45		AP-42 Section 13.2.2, Table 13.2.2-2 (11/06)
PM Emission Factor - CCP to Disposal Area	11.69	lb/VMT	$E = k_{PM} (s/12)^{a} (W/3)^{b} * (365-P)/365$
PM ₁₀ Emission Factor - CCP to Disposal Area	3.33	lb/VMT	$E = k_{PM10} (s/12)^{a} (W/3)^{b} * (365-P)/365$
PM _{2.5} Emission Factor - CCP to Disposal Area	0.33	lb/VMT	$E = k_{PM2.5} (s/12)^{a} (W/3)^{b} * (365-P)/365$
PM Emission Factor - Return Trip	9.32	lb/VMT	$E = k_{PM} (s/12)^{a} (W/3)^{b} * (365-P)/365$
PM ₁₀ Emission Factor - Return Trip	2.66	lb/VMT	$E = k_{PM10} (s/12)^{a} (W/3)^{b} * (365-P)/365$
PM _{2.5} Emission Factor - Return Trip	0.27	lb/VMT	$E = k_{PM2.5} (s/12)^{a} (W/3)^{b} * (365-P)/365$

Table N-3. New Haulroad Traffic

 $E = k (s/12)^{a} (W/3)^{b} (365-P)/365$

AP-42 Section 13.2.2, Equation 2 (November 2006)

EMISSIONS CALCULATIONS

Uncontrolled

	Potential Emissions - PM		Potential Emi	ssions - PM ₁₀	Potential Emissions - PM 2.5	
Path	lb/hr ^a	tpy ^b	lb/hr ^a	tpy ^b	lb/hr ^a	tpy ^b
CCP to Disposal Area	404.18	442.07	115.21	126.01	11.52	12.60
return trip	321.94	352.12	91.77	100.37	9.18	10.04
TOTAL	726.11	794.19	206.98	226.38	20.70	22.64

^a Potential uncontrolled Pollutant Emissions (lb/hr) = Potential Paved VMT (miles/hr) * Path Pollutant EF (lb/VMT)

^a Potential uncontrolled Pollutant Emissions (tpy) = Potential Paved VMT (miles/yr) * Path Pollutant EF (lb/VMT) / 2,000 (lbs/ton)

Controlled

	Potential Emissions - PM		Potential Emi	issions - PM 10	Potential Emissions - PM 2.5	
Path	lb/hr ^a	tpy ^b	lb/hr ^a	tpy ^b	lb/hr ^a	tpy ^b
CCP to Disposal Area	121.25	132.62	34.56	37.80	3.46	3.78
return trip	96.58	105.64	27.53	30.11	2.75	3.01
TOTAL	217.83	238.26	62.09	67.91	6.21	6.79

^a Potential controlled Pollutant Emissions (lb/hr) = Potential Paved VMT (miles/hr) * Path Pollutant EF (lb/VMT) * (1-Control Efficiency (%))

^a Potential uncontrolled Pollutant Emissions (tpy) = Potential Paved VMT (miles/yr) * Path Pollutant EF (lb/VMT) / 2,000 (lbs/ton) * (1-Control Efficiency (%))

ATTACHMENT O: MONITORING, RECORDKEEPING, REPORTING AND TESTING PLANS

MCCC proposes the following monitoring, recordkeeping, reporting, and testing measures be implemented for the proposed project:

MCCC proposes the monitoring, recordkeeping, reporting, and testing requirements as specified in the existing R13 permit. These requirements are adequate to demonstrate compliance with emission limits and operating parameters.

Attachment P includes a copy of the public notice MCCC will submit to the Moundsville Echo for publication. A certificate of publication will be provided to the WV DEP after the notice has been published.

AIR QUALITY PERMIT NOTICE Notice of Application

NOTICE IS GIVEN that Marshall County Coal Company has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Construction Permit for new material handling equipment at West Virginia State Rt 2, in Moundsville, in Marshall County, West Virginia. The latitude and longitude coordinates are 39.828, -80.813.

The applicant estimates the total increased potential to discharge the following Regulated Air Pollutants will be: Particulate Matter – 110.46 tons per year; Particulate Matter (10 micron diameter or less) – 31.52 tons per year; and Particulate Matter (2.5 micron diameter or less) – 3.16 tons per year.

Startup of operation is planned to begin on or about the 1st day of July, 2017. 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 XX day of March, 2017.

By: The Marshall County Coal Company Jason D. Witt Secretary 46226 National Road W St. Clairsville, OH 43950 740-338-3100