

PERMIT TO CONSTRUCT APPLICATION

Consolidation Coal Company McElroy Facility

Coal Combustion Product Beltline Project

Prepared By:

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September 2015

Project 153601.0106



Environmental solutions delivered uncommonly well

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1.1. INTRODUCTION

Consolidation Coal Company (CCC) operates a coal preparation plant located in Marshall County near Moundsville, West Virginia (referred to as the McElroy facility). The McElroy Facility is currently operating in accordance with West Virginia Department of Environmental Protection (WVDEP) Division of Air Quality (DAQ) state operating permit R13-2177E, issued on July 28, 2009.

With this application, CCC is requesting authorization to construct a conveyor system and river unloading facility to handle coal combustion product (CCP) at the McElroy Facility. Details regarding the proposed project are found in Section 1.2 below.

1.2. OVERVIEW OF PROPOSED PROJECT

A barge mounted crane will be used to unload CCP from barges. The CCP will be conveyed to a truck bin via a series of 4 conveyors. The truck bin will then dump into haul trucks. The haul trucks will transport the CCP to the existing refuse disposal areas.

With this project, CCC is proposing to install the following equipment:

- > Four (4) conveyors, each rated at 1,600 tons per hour (tph);
- > One (1) refuse truck bin; and
- > One (1) barge mounted crane for unloading barges.

1.3. PROJECT POTENTIAL TO EMIT (PTE)

The proposed project will result in an increase in potential emissions of PM, PM_{10} , 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 truck bin to the refuse disposal area. 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.

	PM (tpy)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
Transfer Points	0.12	0.06	0.01
Haul Roads	94.55	26.95	2.69
TOTAL	94.67	27.01	2.70

Table 1-1. Project Potential Emissions Increases

1.4. ORGANIZATION OF APPLICATION

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

Section 2: Regulatory ApplicabilitySection 3: WVDAQ Application Forms

> Attachment A: CCC'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 FacilityAttachment F: Process Flow Diagrams

> Attachment G: Process Description of the Facility

> Attachment I: Equipment List Form

> Attachment J: Emission Points Data Summary Sheet

> Attachment K: Fugitive Emission Points Data Summary Sheet

> Attachment L: Emission Unit Data Sheet

Attachment M: Air Pollution Control Device Sheet
 Attachment N: Detailed Emission Calculations

> Attachment 0: 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 McElroy Facility. 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 McElroy Facility.

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 McElroy Facility result in emissions increases of filterable PM (i.e., $PM/PM_{10}/PM_{2.5}$). 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 McElroy Facility is subject to a PSD major source threshold of 250 tons for each NSR-regulated pollutant as provided in 45CSR14-2.43.b.

The McElroy Facility 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, the project-

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 McElroy Facility are not included when determining major source status under PSD.

associated emissions increases for all NSR-regulated pollutants do not exceed the applicable threshold, and the McElroy Facility 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 McElroy Facility 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 McElroy Facility is potentially subject.

In addition to the specific standards described below, CCC 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 McElroy Facility will include the installation of new affected facilities under NSPS Y. The four (4) 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), CCC 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.

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 McElroy Facility 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 McElroy Facility is not subject to any NESHAP requirements applicable to specific source categories, and because the McElroy Facility is an area source of HAP, CCC 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 McElroy Facility 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 McElroy Facility.

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 McElroy Facility 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; the new conveyors and the modified vehicular traffic that are part of the proposed project are subject to this 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 CCC 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. CCC 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 McElroy Facility 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 McElroy Facility is exempt from the requirements of 45CSR17.

3. PERMIT APPLICATION FORMS

The permit application forms in Attachments A through P are being submitted as required by WVDAQ for a permit to construct.

CCC will submit an appropriate check under a separate cover. The check will cover the permit application fee of \$1,000 provided in 45CSR22-3.4.a and 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 QUALITY

601 57th Street, SE

APPLICATION FOR NSR PERMIT **AND**

Charleston, WV 25304 (304) 926-0475 www.dep.wv.gov/dag	TITLE V PERMIT REVISION (OPTIONAL)						
PLEASE CHECK ALL THAT APPLY TO NSR (45CSR13) (IF K	(NOWN):	PLEASE CHECK	TYPE OF 450	SR30 (TITLE V) REVISION (IF ANY):			
■ CONSTRUCTION ■ MODIFICATION □ RELOCATION	N	☐ ADMINISTRAT		_			
☐ CLASS I ADMINISTRATIVE UPDATE ☐ TEMPORAR	Y	SIGNIFICANT					
☐ CLASS II ADMINISTRATIVE UPDATE ☐ AFTER-THE-	FACT			ED, INCLUDE TITLE V REVISION NT S TO THIS APPLICATION			
FOR TITLE V FACILITIES ONLY: Please refer to "Title" (Appendix A, "Title V Permit Revision Flowchart") and							
Sec	ction l	I. General					
Name of applicant (as registered with the WV Secreta Consolidation Coal Company	ary of St	ate's Office):	 Federal I 13-256659 	Employer ID No. <i>(FEIN):</i> 4			
3. Name of facility (if different from above):			4. The applic	cant is the:			
McElroy Facility			\square OWNER	□OPERATOR ■ BOTH			
5A. Applicant's mailing address:	į	5B. Facility's prese	ent physical a	ddress:			
46226 National Road W	\	West Virginia State Rt. 2,					
St. Clairsville, OH 43950	1	loundsville, WV 26041					
 6. West Virginia Business Registration. Is the applicant If YES, provide a copy of the Certificate of Incorporation change amendments or other Business Registration □ If NO, provide a copy of the Certificate of Authority amendments or other Business Certificate as Attach 	ration/O Certifica y/Author	Organization/Limit ate as Attachmen rity of L.L.C./Regi	ted Partners t A.	hip (one page) including any name			
7. If applicant is a subsidiary corporation, please provide	the nan	ne of parent corpo	ration:				
8. Does the applicant own, lease, have an option to buy	or other	wise have control	of the <i>propos</i>	ed site? YES NO			
다 If YES, please explain:							
The land occupied by the McElroy Preparation Plant is owned by CCC. 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: 212112							
11A. DAQ Plant ID No. (for existing facilities only):				CSR30 (Title V) permit numbers existing facilities only):			
051-00020 R13-2177E							
All of the required forms and additional information can be	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. I-70 East to 7 South. Moundsville 12th Street Exit. Rt. on Rt 2 South to Roberts Ridge. Follow Roberts Ridge to Salem Church. Left at Salem Church onto Goshorn Ridge. Follow road to Portal on Rt. 12.B. New site address (if applicable): 12C. Nearest city or town: 12D. County: N/A Moundsville Marshall 12.E. UTM Northing (KM): 12F. UTM Easting (KM): 12G. UTM Zone: 4.409 516 17 13. Briefly describe the proposed change(s) at the facility: CCC plans to construct a conveyor system and river unloading facility to handle coal combustion product (CCP) at the McElroy Facility. 14A. Provide the date of anticipated installation or change: 1 14B. Date of anticipated Start-Up 다 If this is an After-The-Fact permit application, provide the date upon which the proposed if a permit is granted: change did happen: N/A Upon permit issuance 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: Days Per Week 52 Weeks Per Year Hours Per Day 7 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. 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 attachments and supporting documents. 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.
- 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). See attached.
- 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	,	•
For chemical processes, provide a MS		
25. Fill out the Emission Units Table and		
		ple 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 Prod	eessing
Fill out and provide the Emissions Unit D	Pata 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
Other Collectors, specify		Enclosure systems, water truck
Fill out and provide the Air Pollution Con	tral Davica Shoot(s) as Attach	mont M
Items 28 through 31. See attache		or attach the calculations directly to the forms listed in
	compliance with the proposed er	proposed monitoring, recordkeeping, reporting and missions limits and operating parameters in this permit ned.
Please be aware that all permits must	t be practically enforceable whet y not be able to accept all measu	her or not the applicant chooses to propose such ires proposed by the applicant. If none of these plans
32. Public Notice. At the time that the a	application is submitted, place a	Class I Legal Advertisement in a newspaper of general
circulation in the area where the source	ce is or will be located (See 45C	SR§13-8.3 through 45CSR§13-8.5 and <i>Example Legal</i>
Advertisement for details). Please s	ubmit the Affidavit of Publication	on as Attachment P immediately upon receipt. See attached.
33. Business Confidentiality Claims.	Ooes this application include conf	
☐ YES	■ NO	
	ng the criteria under 45CSR§31-	mitted as confidential and provide justification for each 4.1, and in accordance with the DAQ's "Precautionary Instructions as Attachment Q.
•	ction III. Certification of	
34. Authority/Delegation of Authority. Check applicable Authority Form be		her than the responsible official signs the application.
Authority of Corporation or Other Busin	ness Entity	Authority of Partnership
☐ Authority of Governmental Agency	•	Authority of Limited Partnership
Submit completed and signed Authority F		
		Permitting Section of DAQ's website, or requested by phone.
,		G , , priorier

35A. Certification of Information. To certify 2.28) or Authorized Representative shall check	this permit application, a Responsible Office the appropriate box and sign below.	cial (per 45CSR§13-2.22 and 45CSR§30-		
Certification of Truth, Accuracy, and Comp	leteness			
I, the undersigned Responsible Official / application and any supporting documents appreasonable inquiry I further agree to assume restationary source described herein in accordant Environmental Protection, Division of Air Quality and regulations of the West Virginia Division of business or agency changes its Responsible Conotified in writing within 30 days of the official of	pended hereto, is true, accurate, and complesponsibility for the construction, modification ce with this application and any amendme ty permit issued in accordance with this appled f Air Quality and W.Va. Code § 22-5-1 et sentificial or Authorized Representative, the Dificial or Authorized Representative, the Dificial or Authorized Representative,	ete based on information and belief after on and/or relocation and operation of the nts thereto, as well as the Department of olication, along with all applicable rules on (State Air Pollution Control Act). If the		
35B. Printed name of signee: Robert D. M	fter reasonable inquiry, all air contaminant s	chieved, I, the undersigned hereby certify sources identified in this application are in DATE: (Please use blue ink) 35C. Title: Vice President		
35D. E-mail: rmoore@coalsource.com	36E. Phone: (740) 338-3100	36F. FAX: (740) 338-3416		
36A. Printed name of contact person (if differe Drew Hudson		36B. Title: Permitting Manager		
36C. E-mail: dhudson@coalsource.com	36D. Phone: (740) 338-3100	36E. FAX: (740) 338-3416		
PLEASE CHECK ALL APPLICABLE ATTACHMEN Attachment A: Business Certificate Attachment B: Map(s) Attachment C: Installation and Start Up Schell Attachment D: Regulatory Discussion Attachment E: Plot Plan Attachment F: Detailed Process Flow Diagran Attachment G: Process Description Attachment H: Material Safety Data Sheets (M Attachment I: Emission Units Table Attachment J: Emission Points Data Summar Please mail an original and three (3) copies of the address listed on the first	Attachment K: Fugitive E Attachment L: Emissions Attachment M: Air Polluti Attachment N: Supportin Attachment O: Monitoring Attachment P: Public Not Attachment Q: Business SDS) Attachment R: Authority Attachment S: Title V Per y Sheet	missions Data Summary Sheet Unit Data Sheet(s) On Control Device Sheet(s) g Emissions Calculations g/Recordkeeping/Reporting/Testing Plans ice Confidential Claims Forms mit Revision Information ure(s) to the DAQ, Permitting Section, at the		
FOR AGENCY LISE ONLY - IE THIS IS A TITLE V	SOURCE			
☐ NSR permit writer should notify Title N ☐ For Title V Significant Modifications processe ☐ NSR permit writer should notify a Title ☐ Public notice should reference both 45 ☐ EPA has 45 day review period of a dra	V Permitting Group and: I permit writer of draft permit, opriate notification to EPA and affected states I permit writer of draft permit. Id in parallel with NSR Permit revision: I V permit writer of draft permit, I V permit.			
All of the required forms and additional information	on can be found under the Permitting Section	n of DAQ's website, or requested by phone.		

ATTACHMENT A: BUSINESS CERTIFICATE

WEST VIRGINIA STATE TAX DEPARTMENT BUSINESS REGISTRATION CERTIFICATE

ISSUED TO:

MCELROY COAL COMPANY

RR 1 BOX 67A

GLEN EASTON, WV 26039-9713

BUSINESS REGISTRATION ACCOUNT NUMBER:

1023-2751

This certificate is issued on:

06/15/2010

This certificate is issued by the West Virginia State Tax Commissioner in accordance with W.Va. Code § 11-12.

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.1 L1957010176



Figure B-1. McElroy Facility Aerial View of Surrounding Area

ATTACHMENT C: INSTALLATION AND STARTUP SCHEDULE

The McElroy Facility was issued Permit to Construct R13-2177E on July 28, 2009. This modification application is submitted to update the R13 permit to authorize the installation of new equipment to transfer coal combustion product to the existing refuse disposal areas. Construction activities associated with the proposed project will not commence until the revised R13 permit has been issued.

ATTACHMENT D: REGULATORY DISCUSSION

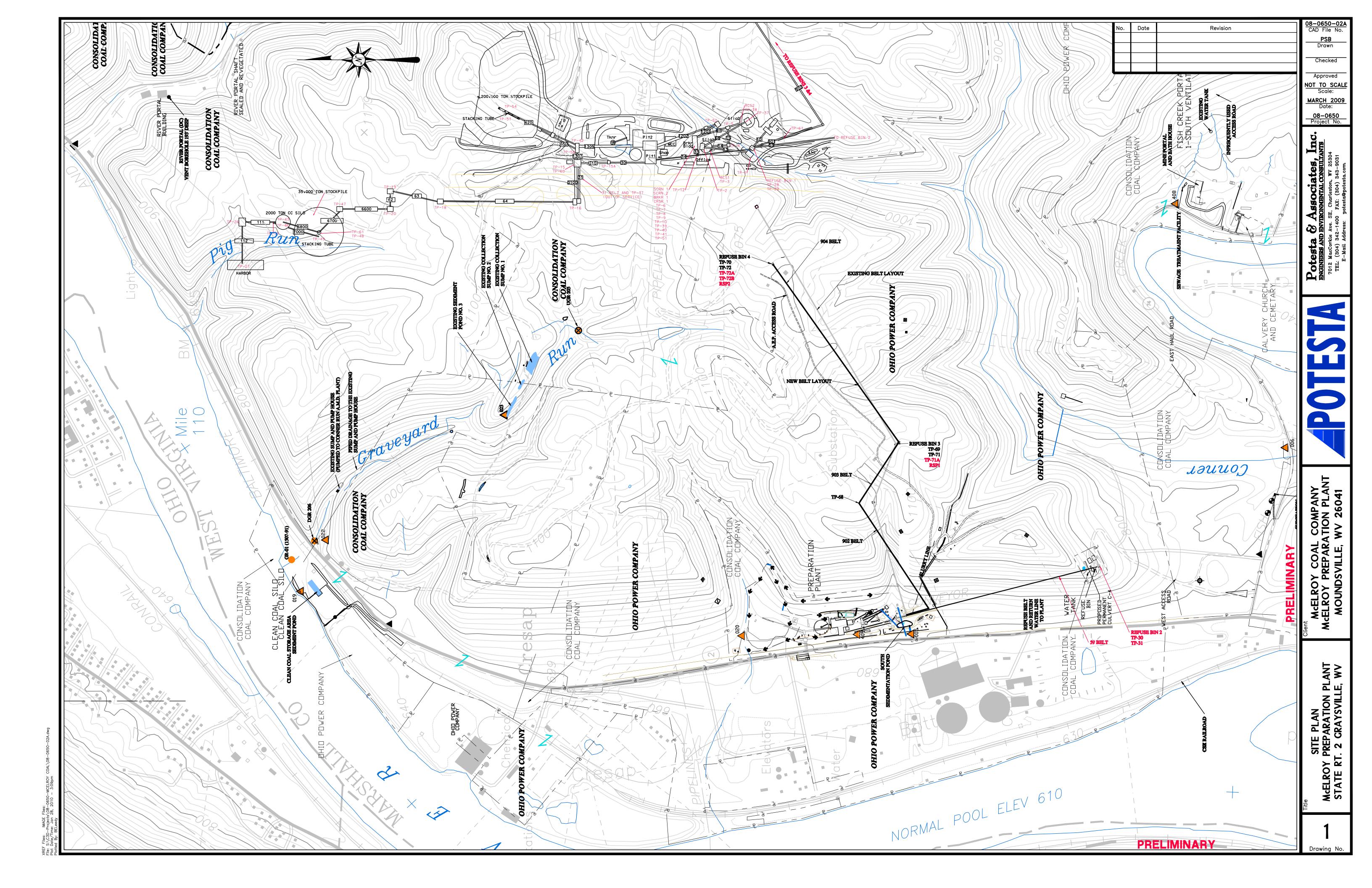
This section documents the applicability determinations made for federal and state air quality regulations. Federal and WVDEP state regulations that are potentially applicable to the McElroy Facility are listed in Tables D-1 and D-2. Notes are provided for each applicability determination briefly summarizing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

Table D-1. Federal Applicability

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. CCC 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), CCC 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 McElroy facility will remain a minor source with respect to the Title V operating permit program after installation of the proposed equipment.

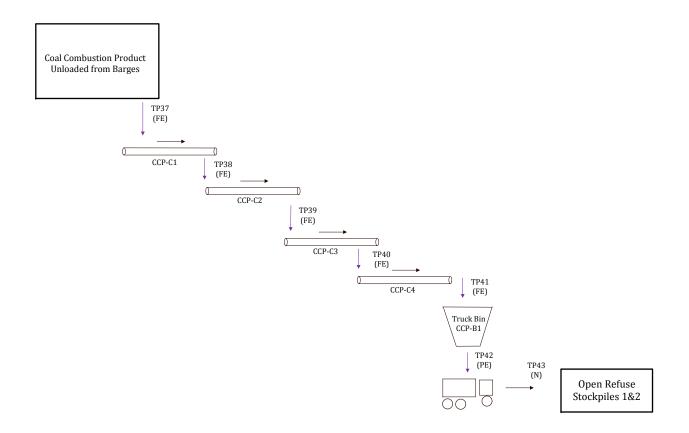
Table D-2. State Rule Applicability

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"	CCC is subject to the standards and provisions in 45CSR5. The new conveyors and vehicular traffic will be subject to these provisions. CCC 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 McElroy facility 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. CCC 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 McElroy facility will remain a minor source with respect to the Title V operating permit program after installation of the proposed equipment.



ATTACHMENT F: PROCESS FLOW DIAGRAM

Attachment F. Coal Combustion Product Unloading Project Process Flow Diagram



Consolidation Coal Company –

McElroy Facility

Process Flow Diagram



153601.0106 September 2015

ATTACHMENT G: PROCESS DESCRIPTION

The McElroy Facility 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, CCC is requesting authorization to construct a conveyor system and river unloading facility to handle coal combustion product (CCP) at the McElroy Facility. Specifically, a crane will be used to unload CCP from barges. The CCP will be conveyed to a truck bin via a series of 4 conveyors. The truck bin will then dump into trucks. The trucks will then transport the CCP to the existing refuse stockpiles at the facility.

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)

			r	ı		T
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-C1	TP38	Coal Combustion Product Conveyor 1	2015	1,600 tph	New	FE
CCP-C2	TP39	Coal Combustion Product Conveyor 2	2015	1,600 tph	New	FE
CCP-C3	TP40	Coal Combustion Product Conveyor 3	2015	1,600 tph	New	FE
CCP-C4	TP41	Coal Combustion Product Conveyor 4	2015	1,600 tph	New	FE
CCP-B1	TP42	Truck Bin	2015	300 ton	New	PE
VT-UP	N/A	Vehicular Traffic	2009/2015 M	N/A	Modification	WT

¹ For Emission Units (or \underline{S} ources) use the following numbering system:1S, 2S, 3S,... or other appropriate designation. ² For \underline{E} mission Points use the following numbering system:1E, 2E, 3E, ... or other appropriate designation.

	1	1
Page _	of	

³ New, modification, removal ⁴ For <u>C</u>ontrol Devices use the following numbering system: 1C, 2C, 3C,... or other appropriate designation.

ATTACHMENT J: EMISSION POINTS DATA SUMMARY SHEET

Attachment J EMISSION POINTS DATA SUMMARY SHEET

	Table 1: Emissions Data														
Emission Point ID No. (Must match Emission Units Table & Plot Plan)	Emission Point Type ¹	Point Vented		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)	Pote Uncon	mum ential strolled sions ⁴	Maxir Pote Contr Emiss	ntial olled	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)		
								PM	0.05	0.05	0.01	0.01	Solid	EE	N/A
TP-37	Fugitive	N,	/A	F	Е	N/A	N/A	PM ₁₀	0.02	0.02	0.005	0.005	Solid	EE	N/A
								PM _{2.5}	0.004	0.003	0.0007	0.0007	Solid	EE	N/A
								PM	0.05	0.05	0.01	0.01	Solid	EE	N/A
TP-38	Fugitive	CCP-C1		F	Е	N/A	N/A	PM_{10}	0.02	0.02	0.005	0.005	Solid	EE	N/A
								PM _{2.5}	0.004	0.003	0.0007	0.0007	Solid	EE	N/A
								PM	0.05	0.05	0.01	0.01	Solid	EE	N/A
TP-39	Fugitive	Fugitive CCP-C2		FE		N/A	N/A	PM_{10}	0.02	0.02	0.005	0.005	Solid	EE	N/A
								PM _{2.5}	0.004	0.003	0.0007	0.0007	Solid	EE	N/A
							PM	0.05	0.05	0.01	0.01	Solid	EE	N/A	
TP-40	Fugitive	CCP-C3		FE		N/A	N/A	PM_{10}	0.02	0.02	0.005	0.005	Solid	EE	N/A
								PM _{2.5}	0.004	0.003	0.0007	0.0007	Solid	EE	N/A
					_	PM	0.05	0.05	0.01	0.01	Solid	EE	N/A		
TP-41	Fugitive	ive CCP-C4		F	E	N/A	N/A	PM ₁₀	0.02	0.02	0.005	0.005	Solid	EE	N/A
								PM _{2.5}	0.004	0.003	0.0007	0.0007	Solid	EE	N/A
								PM	0.05	0.05	0.03	0.02	Solid	EE	N/A
TP-42	Fugitive	CCP	-B1	P	E	N/A	N/A	PM_{10}	0.02	0.02	0.01	0.01	Solid	EE	N/A
								PM _{2.5}	0.004	0.003	0.002	0.002	Solid	EE	N/A
								PM	0.05	0.05	0.05	0.05	Solid	EE	N/A
TP-43	Fugitive	N/	/A	ľ	1	N/A	N/A	PM ₁₀	0.02	0.02	0.02	0.02	Solid	EE	N/A
								PM _{2.5}	0.004	0.003	0.004	0.003	Solid	EE	N/A
					WT N/A			PM	71.95	315.15	21.59	94.55	Solid	EE	N/A
VT-UP	Fugitive	VT-	·UP	W		N/A	N/A	PM ₁₀	20.51	89.83	6.15	26.95	Solid	EE	N/A
								PM _{2.5}	2.05	8.98	0.62	2.69	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, SO₃, all applicable Greenhouse Gases (including CO₂ and methane), etc. **DO NOT LIST** H₂, H₂O, N₂, O₃, 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).
- 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		Exit Gas		Emission Point Ele	evation (ft)	UTM Coordinates (km)				
	Diameter (ft.)	Temp. (°F)	Volumetric Flow ¹ (acfm) at operating conditions	Velocity (fps)	Ground Level (Height above mean sea level)	Stack Height ² (Release height of emissions above ground level)	Northing	Easting			

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

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						
	$oxed{oxed}$ If YES, then complete the HAUL ROAD EMISSIONS UNIT DATA SHEET.						
2.)	Will there be Storage Piles?						
	☐ Yes No						
	$\hfill \square$ If YES, complete Table 1 of the NONMETALLIC MINERALS PROCESSING EMISSIONS UNIT DATA SHEET.						
3.)	s.) 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						
	$\hfill \square$ 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						
	$\ \ \ \ \ \ \ \ \ \ \ \ \ $						
	ou answered "NO" to all of the items above, it is not necessary to complete the following table, "Fugitive Emissions mmary."						

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FUGITIVE EMISSIONS SUMMARY	All Regulated Pollutants - Chemical Name/CAS 1	Maximum Potential Uncontrolled Emissions ²		Maximum Potential Controlled Emissions ³		Est. Method
		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	71.95	315.15	21.59	94.55	EE
Unpaved Haul Roads	PM ₁₀	20.51	89.83	6.15	26.95	EE
	PM _{2.5}	2.05	8.98	0.62	2.69	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	0.36	0.34	0.13	0.12	EE
Other	PM ₁₀	0.17	0.16	0.06	0.06	EE
	PM _{2.5}	0.03	0.02	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, SO₃, all applicable Greenhouse Gases (including CO₂ and methane), etc. DO NOT LIST H₂, H₂O, N₂, O₂, and Noble Gases.

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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:									
	Hot-mix asphalt pavement	facility that red	uces the size	of n	onmetallic mineral	s embedded in	recycled asphalt			
		ners or arindina	mills and conta	ininc	g a stand-alone scre	eening operation				
	☐ Sand and gravel p	_	☐ Common cla	_		0 1				
	☐ Crushed stone plant ☐ Pumice plant									
	Other, specify Co	oal Mine and	Preparation F	Plan	nt					
2.										
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-C1 - CCP	-C4	Various	N/A	2015			
	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-B1		N/A	N/A	2015			
	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 Ton/hr	Design Ton/hr		Production Tons/year	Number of Units	Control Device Used			
	Conveyors	1,600	1,600		30,000,000	4	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		30,000,000	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	Wate	ered	Other Control	
		Road	of Road	Miles	Frequency	(Specify)	
	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

Walifala Tana	Mean Vehicle	Mean Vehicl	_	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	

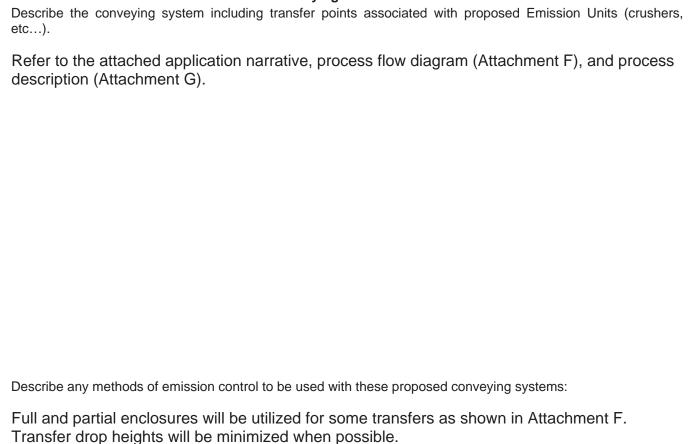
^{10.} Describe all proposed materials storage facilities associated with the ${\bf Emission~Units}$ listed. N/A

Storage Activity

		 , -	1	1
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 (ft²)				
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				

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 1/4"						
1/4" and less						
MFG. Sand						
Other, specify						
Raw Coal: 12" x 0						

Conveying and Transfer



ID of Emission	Type Conveyor or	Material Handled [Note	Material (or Trans	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-C1	Conveyor	Coal Combustion Product	1,600	30,000,000	FE	52.9
CCP-C2	Conveyor	Coal Combustion Product	1,600	30,000,000	FE	52.9
CCP-C3	Conveyor	Coal Combustion Product	1,600	30,000,000	FE	52.9
CCP-C4	Conveyor	Coal Combustion Product	1,600	30,000,000	FE	52.9
CCP-B1	Truck Bin	Coal Combustion Product	1,600	30,000,000	PE	52.9
_						
-						
	I	I	I	1 1		1

Crushing and Screening

	[1		1	1	1
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:						
Height (ft)						
Diameter (ft)						
Volume (ACFM)						
Temp (°F)						
Maximum operating scho	edule:					
Hour/day						
Day/year						
Hour/year						
Approximate Percentage	of Operation	from:	.			
Jan – Mar						
April – June						
July – Sept						
Oct – Dec						
Maximum Particulate Em	nissions:	T	1	T	T	T
LB/HR						
Ton/Year						

List emission sources with request information: Max. Amount of Crushed or Date of **Operating Schedule** Type of Stone Input to **ID** of Emission Screened **Emission Emission Unit** Actual Design Emission Unit From/To **Unit was** and Use (hrs/yr) (hrs/yr) (lb/hr) (size) Manufacture N/A List emission sources with request information: Maximum expected emissions from Emission Unit without Air Pollution Control Equipment **ID** of Emission SO₂ CO VOC PM_{10} NO_x Unit (lbs/hr) (lbs/hr) (lbs/hr) (lbs/hr) (lbs/hr) N/A Maximum expected emissions from Emission Unit without Air Pollution Control Equipment **ID** of Emission PM_{10} SO₂ CO NO_x VOC Unit (tons/yr) (tons/yr) (tons/yr) (tons/yr) (tons/yr) N/A

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 material (%)	8.4	8.4
p =	Number of days per year with precipitation >0.01 in.	157	157

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	Coal Combustion Product to Storage Pile	4	101	10	0.5	14	120,000		70
2									
3									
4									
5									
6									
7									
8									

Source: AP-42 Fifth Edition – 13.2.2 Unpaved Roads

 $E = k \times 5.9 \times (s \div 12) \times (S \div 30) \times (W \div 3)^{0.7} \times (w \div 4)^{0.5} \times ((365 - p) \div 365) =$ lb/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: $[lb \div VMT] \times [VMT \div trip] \times [Trips \div Hour] \times [Ton \div 2000 lb] = Tons/year$

SUMMARY OF UNPAVED HAULROAD EMISSIONS

	PM				PM-10			
Item No.	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	71.95	315.15	21.59	94.55	20.51	89.83	6.15	26.95
2								
3								
4								
5								
6								
7								
8								
TOTALS								

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							
2							
3							
4							
5							
6							
7							
8							

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

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

Ib/Vehicle Mile Traveled (VMT)

Where:

I =	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

Item No.	Uncon		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

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 Nan Type: Full Enclosu					
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 calculations used in selecting or designing this collection device. N/A						
5.	Provide a scale diagram of the control device show	ng internal construction. N	//A				
6.	Submit a schematic and diagram with dimensions a	nd flow rates. N/A					
7.	Guaranteed minimum collection efficiency for each	pollutant collected: N/A					
8.	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: N/A					
11.	Indicate the liquid flow rate and describe equipment	provided to measure pres	sure drop and flow rate, if any.				
N /A	Attach any additional data including auxiliary equ	pment and operation det	ails to thoroughly evaluate the				
	control equipment. N/A	princing and operation des	and to thereaginy evaluate the				
13.	Description of method of handling the collected mat	erial(s) for reuse of dispos	al.				
N/A	1						
	Gas Stream	Characteristics					
14.	14. Are halogenated organics present?						
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				

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_							
Moisture Content (%):			N/A		N/A		
Relati	ve Humidity (%):			N/A		N/A	
16. Type of pollutant(s ⊠ Particulate (typ		SC) _x	Odor Other			
17. Inlet gas velocity:		N/A	ft/sec	18. Pollutant	specific grav	ity: N/A	
19. Gas flow into the c		N/A	PSIA	20. Gas strea	m temperatu Inlet: Outlet	N/A	°F °F
21. Gas flow rate: Design Maximum: Average Expected			ACFM ACFM	22. Particulate	e Grain Load Inlet: Outlet	-	
23. Emission rate of each pollutant (specify) into and out of collector:							
Pollutant	IN Po	ollutan	t	Emission	OUT	Pollutant	Control
	lb/hr	gr	ains/acf	Capture Efficiency %	lb/hr	grains/acf	Efficiency %
A PM10	Varies			N/A	Varies		50
В							
С							
D							
Е							
24. Dimensions of sta	ck: N/A H	eight	N/A	ft.	Diameter	N/A ft.	
25. Supply a curve showing proposed collection efficiency versus gas volume from 25 to 130 percent of design rating of collector. N/A							

Particulate Distribution

26. Complete the table:	Particle Size Distribution at Inlet to Collector	Fraction Efficiency of Collector
Particulate Size Range (microns)	Weight % for Size Range	Weight % for Size Range
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	N/A	N/A
10 – 12	N/A	N/A
12 – 16	N/A	N/A
16 – 20	N/A	N/A
20 – 30	N/A	N/A
30 – 40	N/A	N/A
40 – 50	N/A	N/A
50 – 60	N/A	N/A
60 – 70	N/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 pollution control device inlet and outlet gas conditioning processes (e.g., gas cooling, gas reheating, gas humidification): **N/A**
- 28. Describe the collection material disposal system: N/A
- 29. Have you included Other Collectores Control Device in the Emissions Points Data Summary Sheet? Yes
- 30. Proposed Monitoring, Recordkeeping, Reporting, and Testing

Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.

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 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."

REPORTING: 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."

TESTING: 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."

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 Guaranteed Control Efficiency for each air pollutant. N/A
- 32. Manufacturer's Guaranteed Control Efficiency for each air pollutant. N/A

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. <i>N/A</i>	Control Device Nan 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 calculation N/A	ons used in selecting or o	designing this collection device.				
5.	Provide a scale diagram of the control device showing	g internal construction. N	//A				
6.	Submit a schematic and diagram with dimensions and	d flow rates. N/A					
7.	Guaranteed minimum collection efficiency for each po	ollutant collected: N/A					
8.	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	10. Capacity: N/A					
11.	Indicate the liquid flow rate and describe equipment p	provided to measure pres	sure drop and flow rate, if any.				
N/A	4						
12.	Attach any additional data including auxiliary equip control equipment. N/A	ment and operation det	ails to thoroughly evaluate the				
13.	Description of method of handling the collected mater	rial(s) for reuse of dispos	al.				
N/A	4						
	Gas Stream Cl	naracteristics					
14.	14. Are halogenated organics present?						
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				

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Moisture Content (%):			N/A		N/A		
Relati	ve Humidity (%):			N/A		N/A	
16. Type of pollutant(s ⊠ Particulate (typ		SC) _x	Odor Other			
17. Inlet gas velocity:		N/A	ft/sec	18. Pollutant	specific grav	ity: N/A	
19. Gas flow into the c		N/A	PSIA	20. Gas strea	m temperatu Inlet: Outlet	N/A	°F °F
21. Gas flow rate: Design Maximum: Average Expected			ACFM ACFM	22. Particulate	e Grain Load Inlet: Outlet	-	
23. Emission rate of each pollutant (specify) into and out of collector:							
Pollutant	IN Po	ollutan	t	Emission	OUT	Pollutant	Control
	lb/hr	gr	ains/acf	Capture Efficiency %	lb/hr	grains/acf	Efficiency %
A PM10	Varies			N/A	Varies		50
В							
С							
D							
Е							
24. Dimensions of sta	ck: N/A H	eight	N/A	ft.	Diameter	N/A ft.	
25. Supply a curve showing proposed collection efficiency versus gas volume from 25 to 130 percent of design rating of collector. N/A							

Particulate Distribution

26. Complete the table:	Particle Size Distribution at Inlet to Collector	Fraction Efficiency of Collector
Particulate Size Range (microns)	Weight % for Size Range	Weight % for Size Range
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	N/A	N/A
10 – 12	N/A	N/A
12 – 16	N/A	N/A
16 – 20	N/A	N/A
20 – 30	N/A	N/A
30 – 40	N/A	N/A
40 – 50	N/A	N/A
50 – 60	N/A	N/A
60 – 70	N/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 pollution control device inlet and outlet gas conditioning processes (e.g., gas cooling, gas reheating, gas humidification): **N/A**
- 28. Describe the collection material disposal system: N/A
- 29. Have you included Other Collectores Control Device in the Emissions Points Data Summary Sheet? Yes
- 30. Proposed Monitoring, Recordkeeping, Reporting, and Testing

Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.

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 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."

REPORTING: 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."

TESTING: 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."

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 Guaranteed Control Efficiency for each air pollutant. N/A
- 32. Manufacturer's Guaranteed Control Efficiency for each air pollutant. N/A

N/A

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. <i>N/A</i>	Control Device Nan Type: Water Truck					
3.	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 calculation $\emph{N/A}$	ons used in selecting or o	designing this collection device.				
5.	Provide a scale diagram of the control device showing	g internal construction. N	//A				
6.	Submit a schematic and diagram with dimensions an	d flow rates. N/A					
7.	Guaranteed minimum collection efficiency for each p	ollutant collected: N/A					
8.	8. Attached efficiency curve and/or other efficiency information. 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"						
9.	Design inlet volume: N/A SCFM	10. Capacity: N/A					
11.	Indicate the liquid flow rate and describe equipment	provided to measure pres	sure drop and flow rate, if any.				
N/A	4						
12.	Attach any additional data including auxiliary equipontrol equipment. N/A	oment and operation deta	ails to thoroughly evaluate the				
13.	Description of method of handling the collected mate	rial(s) for reuse of dispos	al.				
N/A	N/A						
Gas Stream Characteristics							
14.	Are halogenated organics present? Are particulates present? Are metals present? N/A N/A	☐ 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				

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	Moisture	Content (%):			N/A		N/A	
	Relative	Humidity (%):			N/A		N/A	
16.	Type of pollutant(s) o ☑ Particulate (type):		☐ SO ₂	x	Odor Other			
17.	Inlet gas velocity:		N/A	ft/sec	18. Pollutant	specific gravity	/: N/A	
19.	Gas flow into the coll N/A ACF @	ector: <i>N/A</i> °F and	N/A	PSIA	20. Gas strea	m temperature Inlet: Outlet:	e: N/A N/A	°F °F
21.	Gas flow rate: Design Maximum: Average Expected:	N/A N/A		ACFM ACFM	22. Particulate	e Grain Loadir Inlet: N Outlet:	= =	
23.	Emission rate of each	h pollutant (spe	cify) into	o and out	of collector:			
	Pollutant	IN Po	ollutant		Emission	OUT F	Pollutant	Control
		lb/hr	gra	ains/acf	Capture Efficiency %	lb/hr	grains/acf	Efficiency %
	A PM10	Varies			N/A	Varies		70
	В							
	С							
	D							
	E							
24.	Dimensions of stack:	N/A Hei	ight	N/A	ft. N/A	Diamete	r <i>N/A</i>	ft.
25.	25. Supply a curve showing proposed collection efficiency versus gas volume from 25 to 130 percent of design rating of collector. N/A							

Particulate Distribution

26. Complete the table:	Particle Size Distribution at Inlet to Collector	Fraction Efficiency of Collector
Particulate Size Range (microns)	Weight % for Size Range	Weight % for Size Range
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	N/A	N/A
10 – 12	N/A	N/A
12 – 16	N/A	N/A
16 – 20	N/A	N/A
20 – 30	N/A	N/A
30 – 40	N/A	N/A
40 – 50	N/A	N/A
50 – 60	N/A	N/A
60 – 70	N/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 pollution control device inlet and outlet gas conditioning processes (e.g., gas cooling, gas reheating, gas humidification): **N/A**
- 28. Describe the collection material disposal system: N/A
- 29. Have you included Other Collectores Control Device in the Emissions Points Data Summary Sheet? Yes
- 30. Proposed Monitoring, Recordkeeping, Reporting, and Testing

Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.

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 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."

REPORTING: 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."

TESTING: 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."

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 Guaranteed Control Efficiency for each air pollutant. N/A
- 32. Manufacturer's Guaranteed Control Efficiency for each air pollutant. N/A

N/A

ATTACHMENT N: SUPPORTING EMISSIONS CALCULATIONS

Table N-1. Coal Combustion Product Beltline Project Potential to Emit

	PM	PM ₁₀	$PM_{2.5}$
	Filterable	Filterable	Filterable
	(tpy)	(tpy)	(tpy)
Transfers	0.12	0.06	0.01
Roads	94.55	26.95	2.69
Project Total	94.67	27.01	2.70
Pre-Project PTE	300.52	118.52	31.87
Pre-Project PTE (w/o roadways)	165.29	79.97	28.01
Postproject PTE	395.19	145.53	34.57
Postproject PTE (w/o roadways)	165.41	80.03	28.02

Table N-2. Transfer Points

EMISSIONS CALCULATIONS

				PM				Potentia	l to Emit	
				Emission	Contr.	Moist.		PM		PM
Flow Diagram		Transf	er Capacity	Factor ^a	Effic.b	Content	(lk	o/hr)	(tpy)
ID	Emission Source Description	(tph)	(tpy)	(lb/ton)	(%)	(%)	Controlled	Uncontrolled		Uncontrolled
TP37	Crane to CCP conveyor 1	1,600	3,000,000	3.19E-05	80	52.9	0.01	0.05	0.01	0.05
TP38	CCP conveyor 1 to CCP conveyor 2	1,600	3,000,000	3.19E-05	80	52.9	0.01	0.05	0.01	0.05
TP39	CCP conveyor 2 to CCP conveyor 3	1,600	3,000,000	3.19E-05	80	52.9	0.01	0.05	0.01	0.05
TP40	CCP conveyor 3 to CCP conveyor 4	1,600	3,000,000	3.19E-05	80	52.9	0.01	0.05	0.01	0.05
TP41	CCP conveyor 4 to truck bin	1,600	3,000,000	3.19E-05	80	52.9	0.01	0.05	0.01	0.05
TP42	Truck bin to trucks	1,600	3,000,000	3.19E-05	50	52.9	0.03	0.05	0.02	0.05
TP43	Trucks to refuse disposal area	1,600	3,000,000	3.19E-05	0	52.9	0.05	0.05	0.05	0.05
					TOTAL PM		0.13	0.36	0.12	0.34
				T0	TAL PM ₁₀ ^c		0.06	0.17	0.06	0.16
				TO	TAL PM _{2.5} ^d		0.01	0.03	0.01	0.02

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 (%)

- c. Total PM₁₀ Emissions = Total PM Emissions * (k_{PM10}/k_{PM})
- d. Total PM_{2.5} Emissions = Total PM Emissions * $(k_{PM2.5}/k_{PM})$

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

Table N-3. Haulroads

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

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

DIMENSIONAL ANALYSIS

Mass Conversion 2,000 lb/ton NIST SP1038

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	0.50	7	60,000	126	50	3,000,000
return trip	0.50	7	60,000	76	30	3,000,000

OPERATING PARAMETERS

Potential VMT - CCP to Disposal Area	3.4 miles/hr	= Roadway Length (miles/vehicle) * Vehicle Traffic (trips/hr)
Potential VMT - Return Trip	3.4 miles/hr	= Roadway Length (miles/vehicle) * Vehicle Traffic (trips/hr)
Potential VMT - CCP to Disposal Area	30,000.0 miles/year	= Roadway Length (miles/vehicle) * Vehicle Traffic (trips/year)
Potential VMT - Return Trip	30,000.0 miles/year	= Roadway Length (miles/vehicle) * Vehicle Traffic (trips/year)
Silt Loading	8.4 %	
Number of Days w/ at least 0.01" of Precipitation (P)	157 days	Consistent with G10-D application instructions
Control Efficiency	70%	Consistent with G10-D application instructions for use of a water truck on unpaved surfaces.

EMISSION FACTORS

Pollutant

Fonutunt		<u></u>
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	$E = k_{PM} (s/12)^a (W/3)^b x (365-P)/365$
PM_{10} Emission Factor - CCP to Disposal Area	3.33 lb/VMT	$E = k_{PM10} (s/12)^a (W/3)^b x (365-P)/365$
PM _{2.5} Emission Factor - CCP to Disposal Area	0.33 lb/VMT	$E = k_{PM2.5} (s/12)^a (W/3)^b x (365-P)/365$
PM Emission Factor - Return Trip	9.32 lb/VMT	$E = k_{PM} (s/12)^a (W/3)^b x (365-P)/365$
PM ₁₀ Emission Factor - Return Trip	2.66 lb/VMT	$E = k_{PM10} (s/12)^a (W/3)^b x (365-P)/365$
PM _{2.5} Emission Factor - Return Trip	0.27 lb/VMT	$E = k_{PM2.5} (s/12)^a (W/3)^b x (365-P)/365$

Table N-3. Haulroads

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

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

EMISSIONS CALCULATIONS

Uncontrolled

	Potential Emissions - PM		Potential Emissions - 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	40.05	175.42	11.42	50.00	1.14	5.00
return trip	31.90	139.73	9.09	39.83	0.91	3.98
TOTAL	71.95	315.15	20.51	89.83	2.05	8.98

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

Controlled

	Potential Emissions - PM		Potential Emissions - 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	12.02	52.63	3.42	15.00	0.34	1.50
return trip	9.57	41.92	2.73	11.95	0.27	1.19
TOTAL	21.59	94.55	6.15	26.95	0.62	2.69

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

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

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

ATTACHMENT O: MONITORING, RECORDKEEPING, REPORTING AND TESTING PLANS

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

CCC 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: AFFADAVIT OF PUBLICATION

Attachment P includes a copy of the public notice CCC 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 Consolidation Coal Company has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Construction Permit for a new coal combustion product unloading system 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 – 94.67 tons per year; Particulate Matter (10 micron diameter or less) – 27.01 tons per year; and Particulate Matter (2.5 micron diameter or less) – 2.70 tons per year.

Startup of operation is planned to begin on or about the 1st day of January, 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 September, 2015.

By: Consolidation Coal Company Robert D. Moore Vice President 46226 National Road W St. Clairsville, OH 43950 740-338-3100